



The United Illuminating Company

Development and Management Plan
for the
Milford 115-kV Transmission Line Upgrade Project
&
The Modifications to the Transmission Lines in
Milford, Connecticut

Petition No. 1110 & 1151

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1.0 INTRODUCTION

The United Illuminating Company (UI) prepared this Development and Management (D&M) Plan for the construction of the Milford 115-kV Transmission Line Upgrade Project and the Modifications to the 115-kV Transmission Lines in Milford, Connecticut (Projects). This D&M Plan covers all construction for these Projects. It was prepared in accordance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies.

1.1 PROJECT BACKGROUND AND DESCRIPTION

UI plans to replace transmission structures of a double circuit 115-kV transmission line, located in Milford, Connecticut in the New Haven to New York railroad right-of-way. The existing UI owned structures along the corridor consist of steel bonnets which are located and attached at the top of railroad catenary structures owned by Connecticut Department of Transportation (CDOT) as well as steel column 'H' frame structures owned by UI. The purpose of these Projects is to upgrade and enhance the reliability in the area. The topographic quadrangle maps in Appendix B illustrate the location of the Projects right-of-way (ROW).

As part of the Projects, UI is proposing the following work

- Along the north side of the railroad, "North Line", in Milford, Connecticut, 26 steel bonnet structures, 1 steel column, 2 steel lattice towers, and 2 H-Frame structures are proposed for replacement with a total of 21 single steel monopole structures (Refer to Appendix C Plan Drawings); and
- Along the south side of the railroad, "South Line", in Milford, Connecticut, 26 steel bonnet structures, 1 steel column, 2 steel lattice towers, and 2 H-Frame structures are proposed for replacement with a total of 22 single steel monopole structures (Refer to Appendix C Plan Drawings); and
- Outside of UI's Milvon Substation, in Milford, Connecticut, 2 H-Frame structures, 1 on the north side of the railroad and one on the south are proposed for replacement with a total of 3 single steel monopole structures (Refer to Appendix C Plan Drawings).

1.2 D&M PLAN PURPOSE AND ORGANIZATION

Pursuant to the conditions included in the Connecticut Siting Council ("CSC") ruling, UI has prepared this D&M Plan, which describes the procedures to be followed during the construction of the Project facilities. In particular, this D&M Plan describes the general procedures for:

- Construction of the Project facilities, the construction schedule and methods, procedures for environmental inspection and Project administration, and techniques for agency notifications or community outreach.
- Restoration of the work areas and other sites affected by construction (e.g., laydown areas, and crossings of roads, streams, wetlands).
- Traffic control on state and municipal roadways.

This D&M Plan is formatted to provide concise information about the different elements of the construction process, ranging from standard construction methods to specific procedures and mitigation measures used in sensitive environmental areas or near residential developments. This D&M Plan shall be used in the field during Project construction and as a reference tool for activities such as agency notifications or community outreach.

The text of this D&M Plan is to be used in conjunction with the detailed Plan Drawings (Appendix C). The Plan Drawings are plotted at a scale of 1 inch equal to 40 feet to illustrate the Project route, land ownership, laydown areas, ancillary facilities, environmental features and site-specific construction procedures. Some of the procedures presented in this D&M Plan may be modified in the field due to changes in site-specific conditions at the time of construction. Procedures for informing the CSC of any modifications are described in Section 7.

1.3 DESCRIPTION OF D&M PLAN STUDIES

This D&M Plan reflects the results of both environmental and engineering studies that were conducted to assist in the final design of the Projects. Studies were completed along the existing 115-kV electric transmission line ROW. These studies included:

- Field engineering studies to select exact locations for the replacement structures, and to identify access roads for use during construction.
- Biological studies, including delineation of federal and state jurisdictional wetlands and watercourses, inventory of vernal pools and amphibian breeding habitats, and general vegetation (cover type) inventories of areas to be cleared as part of the Project.
- Cultural resources review to assess the sensitivity of the Project area for the location of significant archaeological or historic resources.

The information gathered during these studies was used to prepare the final design for the Projects, develop mitigation and restoration plans, and to provide a thorough information base in preparation for construction and workspace restoration.

2.0 REGULATORY APPROVALS AND CONSULTATIONS

2.1 REGULATORY APPROVALS AND REQUIREMENTS

This D&M Plan (i) conforms to the specifications of RCSA Sections 16-50j-60 through 16-50j-62 (Requirements for a D&M Plan, Elements of a D&M Plan, Reporting Requirements); and (ii) reflects adherence to the conditions of the CSC's ruling for the Projects and other relevant regulatory approvals.

2.2 CONSULTATIONS

The Projects have received regulatory approvals or clearances from State and Federal agencies including:

- United States Army Corps of Engineers (USACE or the Corps)
- Connecticut Department of Energy and Environmental Protection (CT DEEP)
- CT DEEP Natural Diversity Database (NDDB)
- State Historic Preservation Office (SHPO)

UI has consulted with municipal officials in the City of Milford during the preparation of this D&M Plan. UI will also submit applications for local road crossing, street excavation and blasting permits where necessary. UI is coordinating with Connecticut Department of Transportation (CDOT) and Metro-North Railroad (MNR) regarding approval for construction of the overhead transmission lines crossing the railroad and with CDOT regarding approval for construction of the overhead transmission lines crossing at Interstate 95. Project construction in locations requiring specific permits will not start until these permit approvals are received.

UI will comply with the requirements and conditions in the siting and permitting approvals summarized in Table 2-1. UI will monitor the construction Contractor's¹ compliance on a daily basis during construction with the input from UI's Environmental Analyst and an Environmental Inspector (EI). UI will report to the CSC as required.

¹ As used in this D&M Plan, the "Contractor" refers to a firm or business engaged by UI to perform construction and/or other services in support of the Project.

Table 2-1: Other Approvals / Consultations for the Projects

Issuing Agency	Approval/Consultation	Permit or Registration Number
State of Connecticut		
CT DEEP	401 Water Quality Certification (Included as Appendix E)	NAE-2014-2326
	Natural Diversity Data Base Review (for Species of Special Concern, Threatened Species and Endangered Species)	1) 20150690 2) 201500689
	Stormwater and Dewatering Wastewaters from Construction Activities Registration (see Appendix F)	2011410120
SHPO	Cultural Resources Review	See Appendix J
PURA	Approval of method and manner of line construction and to energize upon completion	
Federal		
USACE	Section 404 Project Notification Form (Included in Appendix E)	NAE-2014-2326
Municipal		
City of Milford (as applicable)	Consultation with Chief Executive Officers	
	Road/Highway crossing permits, as necessary	

In the event where undocumented and/or non-permitted situations occur during construction activities, all work at that location will stop immediately. UI's project team will work to determine on how the situation needs to be addressed and which agency or agencies need to be contacted. Work will not begin at this location until the project team has developed a resolution and received approval from all applicable agencies and/or stakeholders.

3.0 GENERAL CONSTRUCTION PROCEDURES

3.1 PROJECT FACILITIES AND LAND REQUIREMENTS

The Projects consists of replacing 52 existing steel bonnets, 1 steel column 4 steel lattice structures, and 4 H-Frame structures with 46 single steel monopole structures of an existing double circuit 115-kV transmission line. The Project facilities will be sited within existing transmission ROWs, and the construction of these facilities will require the temporary and permanent use of various areas. The following section provides a narrative description of the facilities of the Projects.

3.1.1 *OVERHEAD LINE FACILITIES*

3.1.1.1 *115-kV Overhead Transmission Line – North Line*

The overhead 115-kV line begins and ends in Milford. The North Line of the Project is located in the City of Milford. The North Line is situated within existing and managed railroad ROW that varies from 130 to 160 feet in width. In general, the full width of this portion of the ROW is actively maintained by both UI and MNR and is characterized by low-growth vegetation.

Along the North Line, the existing ROW currently contains existing 115-kV transmission lines on steel bonnets attached to railroad catenary structures. The North Line utilizes the north set of bonnets, which will be replaced as part of the Project.

3.1.1.2 *115-kV Overhead Transmission Line – South Line*

The overhead 115-kV line begins and ends in Milford. The South Line of the Project is located in the City Milford. The South Line is situated within existing and managed railroad ROW that varies from 130 to 160 feet in width. In general, the full width of this portion of the ROW is actively maintained and is characterized by low-growth vegetation.

Along the South Line, the existing ROW currently contains existing 115-kV transmission lines on steel bonnets attached to railroad steel catenary structures. The South Line utilizes the south set of bonnets, which will be replaced as part of the Project.

3.1.1.3 *Overhead Transmission Line Components*

All of the existing steel bonnets will be replaced with steel monopole structures along both sections of the Project. The galvanized steel structures will be installed with concrete drilled pier foundations.

3.1.1.4 *Overhead Transmission Line Height/Structure Heights*

The height of the transmission line will depend on the changes in ground elevation along the route, crossings of other overhead facilities such as power and communications lines, and crossings of roads. In addition, to minimize impact on landowners, structure heights will also be governed by placing new structures near the old structures that will be removed, and by not adding additional structures – that is, replace the old structures one for one with new structures when possible. The longer the span between these desired structure locations, the taller the structure needs to be to meet the National Electric Safety Code (NESC) clearance criteria.

Along the North Line, structure heights for the single steel monopole structures vary from 70 to 115 feet, with an average height above ground of approximately 92 feet.

Along the South Line, structure heights for the single steel monopole structures vary from 70 to 115 feet, with an average height above ground of 95 feet.

The structure heights are depicted on the Plan Drawings included in Appendix C.

3.2 CONSTRUCTION MANAGEMENT AND CONTACT INFORMATION

The contact information for the project team, consisting of name, telephone number, and e-mail can be found in Appendix K.

3.3 GENERAL CONSTRUCTION SEQUENCE

UI will construct the proposed transmission lines in several stages, some overlapping in time. The following summarizes the sequence of activities for the construction of the overhead transmission lines:

- Prepare material laydown sites (e.g., storage, staging and laydown areas) to support the construction effort (see Appendix C).
- Establish laydown area(s), typically including space for an office trailer, equipment storage and maintenance, sanitary facilities, and parking.
- Survey and stake the ROW boundaries (where necessary), vegetation clearing boundaries, and new structure locations.
- Mark the boundaries of previously delineated wetland and watercourse areas, including vernal pools.

- Identify other areas, as appropriate, where special construction considerations will apply (e.g., active farmlands, where the farmland protection measures will be implemented).
- Perform vegetation clearing.
- Install erosion and sedimentation controls.
- Construct new access roads or improve existing roads. Prepare level work pads as necessary at new structure sites and conductor pulling sites.
- Construct foundations and erect/assemble new structures.
- Install shield wires and conductors.
- Install structure grounding systems, including counterpoise (where needed).
- Remove existing shield wires, conductors, hardware, and steel bonnets.
- Remove temporary roads and construction debris and restore disturbed sites.
- Maintain temporary erosion and sediment controls until vegetation is re-established or disturbed areas are otherwise stabilized.

The project construction along the transmission line route will be overseen by personnel from UI's Contractor. Supervisory personnel will be based in the field and will directly monitor construction activities, including adherence to engineering, safety, and environmental requirements. A UI Environmental Analyst will be assigned to oversee the environmental requirements during construction. Along with the UI Environmental Analyst, UI will have an Environmental Inspector (EI).

3.4 CONSTRUCTION SUPPORT FACILITIES AND LAYDOWN AREAS

The Contractor will establish temporary areas for staging during the construction of the Projects. The laydown areas typically will be used for staging the construction equipment, supplies, and materials used during the Projects. They will also serve as the primary marshaling point for construction workers and thus will be used for vehicle parking. The Contractor normally would also have temporary office trailers within the laydown areas.

Should the need for additional support area(s) be identified during the course of construction, UI will submit Change Notice(s) to the CSC requesting approval of such areas prior to use. Refer to Appendix C for locations of laydown areas.

3.5 VEGETATION CLEARING

Vegetation to be removed is depicted on the plan drawings (over 6" dbh) in Appendix C.

UI obtained rights for transmission lines, including the right to clear vegetation within the full-defined limits of the ROW, and, to the extent that rights exist, to remove any tree or portion of tree outside the ROW ("danger tree") that by falling could endanger the transmission line facilities. Such removal will provide for the safe and reliable operation and maintenance of any line that is built on the ROW.

Notwithstanding these rights, UI plans to minimize tree and other vegetation removal that is required for construction and operation of the line by utilizing low-impact tree clearing. This will include:

- Designing the Project to keep the position of the conductors within the existing cleared ROW corridor as much as possible, thus minimizing additional clearing.
- Allowing low-maturing tree species such as dogwoods to remain within 15 feet of the outer edges of clearing (where these low-maturing species exist).
- Employing directional tree felling – both hand felling and mechanical felling,
- Harvesting in the design and implementation phase as outlined in CT DEEP's Best Management Practices for Water Quality While Harvesting Forest Products, 2007 Connecticut Field Guide,
- Preparing a land clearing contract that includes specifications for access, wetland/stream crossings, vegetation removal, rare species protection, cultural resource protection, and residual site quality,
- When cutting trees close to the ground, stumps and root systems will be left in the ground to naturally decompose over time. These decaying root systems provide additional soil stability as well as hosting native organisms,
- Re-establishing pre-existing access roads for construction vehicles (to minimize the clearing of low growth within the existing corridor),
- Maximizing the use of upland portions of the existing, maintained ROW for work areas and for access,
- Locating new structures close to existing, overlapping the work areas (to reduce to the amount of disturbance for the new structure work areas),

- Determining individual “danger trees” for removal considering the species, soil conditions including wetland vs. upland, susceptibility to flooding, depth to rock (and adaptability of the species to those conditions), health of the tree and inclination of trunk, shape of crown.

3.5.1 *GENERAL REQUIREMENTS*

Edges of existing cleared areas are shown on the drawings in Appendix C.

3.5.2 *TIMBER DISPOSITION AND PILES*

- Any timber deemed to be usable at a later date shall be stock piled a minimum of 100 feet away from the edge of any wetland or watercourse.
- No timber shall be stacked in drainage ways or left within wetland boundaries.
- Trees of less than 4 inches in diameter are to be considered non-useable.

3.5.3 *CLEARING IN WETLANDS*

Any clearing in areas regulated under Section 404 of the Clean Water Act and/or Connecticut’s Inland Wetland and Watercourse Act is outlined below.

- Trees and brush will be cut at ground level by hydroaxes, tree shears, grinders or chain saws.
- Stumps will be left in place unless the removal is necessary to ensure worker safety. Stumps may be ground to a suitable height for safety reasons.
- Clearing adjacent to watercourses will occur up to the high water mark.
- All vegetation, except for invasive species, removed from the corridor will be disposed of.

3.5.4 *BRUSH DISPOSAL*

Trees and brush shall be disposed of in one or more of the following ways depending on applicable permit conditions, and/or as designated by the EI.

- Brush Piles
 - Brush will be piled at the edge of the ROW to provide additional runoff protection or additional wildlife habitat.
 - All brush will be removed from wetland areas.
- Chipping

- Chips will not be left in wetlands or agricultural lands or stockpiled in such a location that they may be transported into a wetland or agricultural land.
- Off Site Disposal
 - Offsite disposal of removed trees and brush will be used when brush piles or chipping are not permitted.

Materials will be taken to a landfill or other facility approved for disposal of construction debris.

3.6 ACCESS ROADS AND WORK PADS

During construction, existing access roads within the ROW will typically be used as the principal means of accessing the work area. Access roads (for maintenance and for ingress/egress to existing transmission structures) already exist along portions of the existing overhead line ROWs. However, in selected locations along CDOT's ROW, new access roads will be created in order to reach new pole locations and remove/replace existing structures.

For new pole locations, permanent access roads are required for construction and ongoing maintenance. Some existing access roads will require maintenance or upgrades (e.g. widened, filled, or graded) to allow safe passage of the necessary equipment to install the new structures. UI intends for the width of temporary and the maintenance to existing access roads in upland areas to range from 12 to 16 feet. The location of access roads which UI is proposing to use during construction are illustrated on the Plan Drawings in Appendix C. All temporary access roads will be removed at the end of the project.

Work pads will be required at each transmission line structure site, as well as at conductor and optical groundwire (OPGW) pulling sites. Work pads will be used to stage structure components for final on-site assembly, provide a safe, level base for the construction equipment used to install foundations and to erect the structure(s). UI will have two different sizes of work pads, 1) a construction pad that will average approximately 30 feet by 50 feet and 2) a pull pad which will average approximately 25 feet by 100 feet. These locations are depicted on the Plan Drawings in Appendix C. All work pad locations will be removed at the end of the project.

Any excess spoils generated from the construction of access roads and work pads will be managed in accordance with UI's Milvon-Devon Soil Management Plan (Appendix G). Additionally, any rock generated from the development of access roads or work pads will be removed offsite.

Prior to the construction of both access roads and work pads UI will install sediment and erosion controls in order to mitigate any erosion or sediment runoff. This can be viewed in Appendix F, Milvon-Devon Stormwater Pollution Control Plan (SWPCP).

3.7 WORKING IN AND AROUND SENSATIVE AREAS

3.7.1 WETLANDS

Along the project corridor there is a segment where access across an upland does not exist due to wetlands (Appendix C). Therefore, construction matting will be used to provide temporary access and a work pad for both the removal and installation of the transmission structures. In addition to the construction matting UI intends to use sediment and erosion controls in order to add another layer of protection from any migration of sediment into the wetland. The sediment and erosion controls that will be used can be viewed in the SWPCP (Appendix F).

3.7.2 ENDANGERED, THREATENED AND SPEACIAL CONCERN SPECIES

Located within the project area are two species of concern. Based on correspondence with the State of Connecticut Department of Energy and Environmental Protection Wildlife Division, UI intends to follow the conditions outline in letters dated 1/13/2014 and 4/2/2014 (Appendix H).

3.8 CONSTRUCTION METHODS

This portion of the Plan provides information on construction methods associated with the electric transmission line facilities. This includes the narrative that follows as well as associated Plan Drawings in Appendix C. The Project will be completed in accordance with good engineering practice, SWPCP (Appendix F), *2002 Connecticut Guidelines for Soil Erosion and Sediment Guidelines*, Occupational Safety and Health Administration (OSHA) standards and will be in conformance with the conditions and stipulations of the CSC ruling and other permits and approvals.

The Project ROW traverses developed land including recreational, residential and commercial/industrial areas, as well as inland wetlands and watercourses. The construction methods described herein are designed to avoid substantial adverse environmental effects. Wetland and watercourse boundaries were delineated and marked along the entire Project corridor for identification and protection during construction. Site-specific plans detailing the locations of the identified wetland areas, as well as the placement of sediment and erosion controls are provided in Appendix C and F.

3.8.1 *PRE-CONSTRUCTION PROCEDURES*

Prior to construction, the monumented line of corridor, ROW boundaries and future structure locations will be surveyed and staked. Wetland and watercourse boundaries, cultural resource areas of concern, and sensitive environmental resource areas, such as species habitats to be monitored and/or avoided will be marked. Refer to Section 5.0 and the drawings and details in Appendix C.

3.8.2 *INSTALLATION OF EROSION AND SEDIMENT CONTROLS*

All sediment and erosion control barriers will be installed prior to initial disturbance of soil and maintained throughout construction. During the projects UI will be required to maintain these controls confirming that everything has been done to reduce the migration of erosion and sediment offsite. The following outlines the inspection criteria for the sediment and erosion controls:

1. Inspections and Reporting

- UI/EI will conduct a plan implementation inspection of the project sites at least once and no more than three times during the first 90 days to confirm compliance with the General Permit and proper initial implementation of all controls measures designated in the Plan for the site for the initial phase of construction.
- UI/EI will inspect the sites at least once every seven calendar days and within 24 hours of the end of a storm that generates concentrated runoff leaving the construction site(s).
- For storms that end on a weekend, holiday or other time after which normal working hours will not commence within 24 hours, an inspection is required within 24 hours only for storms that equal or exceed 0.5 inches. For storms of less than 0.5 inches, an inspection shall occur immediately upon the start of the subsequent normal working hours.
- When the sites have been finally stabilized, inspections shall be conducted at least once every month for three months to confirm compliance with the General Permit.

2. Stormwater Turbidity Monitoring and Reporting

- Sampling shall occur on a monthly basis, during storm events that generate a discharge of stormwater from the site while construction activity is ongoing, until final stabilization of the drainage areas associated with each outfall is achieved. If there is no formal outfall then sampling will be conducted at identified areas of concentrated runoff.
- Sampling shall continue on a monthly basis until final stabilization of the drainage area associated with each outfall is achieved.

The sediment and erosion controls installed during construction will remain in place until that location has been restored and stabilized. Upon restoration and stabilization of the work area, the controls will be removed. Any sediment deposits generated from construction activities will be removed at the time of observation or during the removal of the sediment and erosion controls. The excess sediment will be managed in accordance with UI's Soil Management Plan (Appendix G).

3.8.3 DUST CONTROL

Due to the nature of construction, certain operations may cause fugitive dust emissions. The extent of the dust will be based on either the type of construction activity and/or the weather conditions. Should dust emissions become an issue to the construction activities, pedestrians, abutting properties or motorists, UI will apply a dust suppressant at that time.

3.8.4 NOISE CONTROL

The City of Milford does not have a noise ordinance in place. Therefore, UI will comply with the general guidelines outlined by the Connecticut General Statutes Section 22a-69.1 through 22a-69.7.

3.8.5 SOIL AND GROUNDWATER MANAGEMENT

Due to the type of construction activities and location of the project both soil and groundwater were sampled in order to determine how they would be managed. Based on the analysis within the lab report and the applicable State and Federal guidelines UI developed a site by site specific soil and groundwater management plan. UI's Soil Management Plan can be viewed in Appendix G.

3.8.6 SNOW AND ICE REMOVAL

The removal of snow and ice from construction sites is critical to maintain a safe work environment. Snow and ice removal procedures shall be conducted in accordance with CT DEEP's Best Management Practices for Disposal of Snow Accumulations from Roadways and Parking Lots (Appendix I).

3.8.7 CONSTRUCTION METHODS FOR 115-KV OVERHEAD LINES

The general construction methods for the 115-kV overhead lines are as follows:

3.8.7.1 Steel Pole and Concrete Foundation Installation Sequence

- Foundation locations will be staked.
- Auger drilling will be used to perform the excavation for pier foundations. The size of the excavation will be six feet in diameter and vary from seven to 30 feet deep. Temporary casings may be used in locations where the soil will not stand without support or where, because of ground water conditions, sloughing of the sides of piers may seriously delay or endanger the satisfactory completion of excavation and placement of concrete. The temporary casing will be removed from piers as concrete is placed or soon thereafter.
- Once the excavation is complete, steel reinforcing bars will be placed in the excavation encased in concrete. The concrete will be conveyed from the mixer to the place of the final deposit by methods that will prevent the separation or loss of material.
- Field tests of concrete being placed will be conducted regularly. In general, as an indication of other physical properties the quality of the concrete being produced will be judged by the compressive strength developed within a given period.

- Once a foundation is in place and cured, the steel structure will be assembled and erected. Structures will not be erected on the concrete piers for a minimum of seven calendar days after the concrete has been poured and the compressive strength of the concrete has reached 3,000 psi.
- The structures may be assembled on the ground and erected as a complete unit or assembled in pieces with a crane.
- Once the structure is erected and framed with the support insulators and hardware, it will be ready for installation of the overhead lines.

3.8.7.2 Conductor and Shield Wire Installation

The wires will be pulled over rollers or sheaves mounted on the line structures using pulling and tensioning equipment. This equipment will typically consist of a reel trailer, and a tensioner located at dead ends or as needed.

The wires will be sagged, clipped in, spliced, dead ended and jumpered.

3.8.7.3 Substations

The Milvon to Devon Tie line conductor is being replaced with 1590 ACSS up to the line disconnect switch. Relay setting changes will be needed for the lines between Milvon and Devon Tie substations. In addition, for both lines, the existing 4/0 copper static wire is being replaced with optical ground wire.

Without exception, all work will occur within the existing fenced portions of each substation, there will be no substantial adverse environmental effects from such work, and as these are one-for-one equipment replacements (or minor modifications), the height of the new equipment will not exceed the height of the highest piece of existing equipment in the applicable substation.

The specific work is outlined as follows:

A. Milvon Substation

- Install two outdoor fiber optic (FO) splice enclosures within substation fence.
- Excavate and install below grade PVC conduits from FO splice enclosures to control room.
- Install two FO patch panels inside control room.

B. Devon Tie Switching Station

- Excavate and install below grade PVC conduits from FO splice enclosures to control room.

- Install two FO patch panels inside control room.
- Install two outdoor FO splice enclosures within substation fence

3.9 FINAL RESTORATION

3.9.1 *RESTORATION REQUIREMENTS*

ROW cleanup and restoration activities will include the removal of construction debris, temporary access roads, and temporary work pads, followed by final re-grading of areas affected by construction and site stabilization using re-vegetation or other measures.

Construction mats used in temporary access road and work pad construction will be cleaned of any seed stock and will be removed from the ROW.

After final grading, upland areas affected by construction will be seeded with appropriate seed mixes. Seed mix(es) will be selected by UI to provide a quick vegetative cover until vegetation recolonizes the ROW naturally. In most locations, native vegetative communities are expected to re-establish dominance along the ROWs. At some locations, site specific erosion and sediment controls (e.g., erosion control blankets, mulch) will be used as appropriate due to the grade or long term need for restoration. In some areas, longer term sediment and erosion control measures, such as water diversion bars or crushed stone, will be installed as appropriate.

Wetland areas affected by construction will be restored using a New England Wetland Seed Mix, which will serve to provide a temporary vegetative cover until wetland species become reestablished. No upland rye seed, fertilizer, lime, or hay mulch will be applied in wetlands unless specified by the USACE or CT DEEP regulatory approvals. A major concern regarding successful restoration of wetlands is growth of invasive plant species. Based on the approach of applying the NE Wetland Seed Mix with a thin layer of straw (contains no invasive species) UI anticipates that this method will impede the colonization of any invasive species.

Based on the requirements of the SWPCP the sediment and erosion controls will be left in place and maintained until final stabilization is achieved. Once the restoration conditions identified in the SWPCP have been met UI will remove all sediment and erosion controls.

Vegetative species compatible with the use of the ROWs for transmission line purposes are expected to regenerate naturally over time. UI will promote the re-growth of compatible species by implementing vegetation management practices to control tall-growing trees, and where practicable, undesirable invasive species, thereby enabling native plants to dominate the ROWs. Vegetation management practices along the ROWs also will conform to Project-specific

conditions regarding habitat restoration and enhancement as may be included in approvals from the CSC, CT DEEP, and USACE.

3.9.1.1 *Clean-up*

UI shall make every effort to complete final cleanup of an area (including final grading and installation of more long term sediment and erosion control measures) after completing work within that area. All construction debris will be removed following the completion of construction activities and transmission line structure erection. Once the structures are erected, the UI will restore the original contours to the extent practical. If this schedule cannot be met, final cleanup must be completed as soon as possible.

3.9.1.2 *Over Winter Site Stabilization*

In the event that the final phases of construction occur too late in the year for cleanup activities to proceed, the following procedures will be implemented along the disturbed ROW at those locations until final restoration measures can be completed:

- Install permanent interceptor dikes at specified intervals on all slopes.
- Install temporary sediment barriers adjacent to stream and wetland crossings, as well as other critical areas.
- Seed upland work areas with winter rye (Aroostock or Balbo variety) or similar variety.
- Mulch non-paved work areas at 2.5 tons per acre with wheat straw, including areas adjacent to stream and wetland crossings.
- Seed segregated topsoil piles with annual ryegrass.

3.9.2 *RESIDENTIAL*

Every effort will be made to ensure that construction activities minimize impacts to residences and that cleanup is timely and thorough. UI will strive to accommodate special concerns regarding ornamental shrubs, trees, or structures by avoidance if such avoidance will not unduly interfere with construction and operation of the facilities. Measures will be taken to ensure that construction activities will not prevent emergency vehicles access to residential areas. Topsoil in landscaped lawns will either be segregated or topsoil will be imported. After backfilling, residential areas will be restored and all construction debris will be removed. Lawns will be raked, topsoil added as necessary and restored to pre-construction conditions. Fences, mailboxes, and other structures that have been removed will be restored. Sidewalks and driveways will be restored as soon as practical.

3.10 COMMISSIONING

Commissioning of the newly installed facilities will be performed according to standard UI procedures.

4.0 CONSTRUCTION SCHEDULE

4.1 CONSTRUCTION SCHEDULE

Project construction is scheduled to begin in July 2015 and end in December 2016.

Although the transmission lines and ancillary facilities will be constructed to meet this in-service date, full restoration of the disturbed areas (e.g., temporary access roads, laydown areas) may require additional time due to the completion of construction outside of the 2016 growing season. Such work (e.g., final site stabilization, reseeding) may be performed, as necessary, during the 2017 growing season, and thereafter as may be required to complete the restoration program. In addition, following the installation of the facilities, UI will monitor the route and will implement restoration and stabilization measures as appropriate. Overall, the construction of the Project is expected to require approximately 18 months, exclusive of the final restoration work that will be performed in the spring and/or summer of 2017.

Although electric transmission line construction typically will proceed in a linear fashion, UI anticipates that multiple construction crews will be working concurrently on different segments of the Project. For example, the structure replacement will be completed using a dedicated crew (or subcontractor) that specializes in overhead construction within existing ROW. While the construction is proceeding, work on other aspects of the line will be conducted concurrently.

4.2 WORK HOURS

Construction work hours will typically occur between 7:00 AM and 7:00 PM, five days per week (Monday through Friday), and sometimes require work on Saturdays and Sundays. Some construction activities will take place at night between 10:00 PM and 5:00 AM, Monday through Sunday. Construction workers may arrive for work and leave work outside of these times.

However, certain activities, such as those that must be performed during outages, may involve work during non-typical hours, in some cases on a continuous (24-hour) basis. The performance of these activities during non-typical work hours can be critical for completing the required work within the allowed outage durations.

4.3 SPECIAL CONSTRUCTION TIMING WINDOWS

Special timing windows have been established for certain activities associated with the construction of the Project. These special timing windows are described in Section 3.7.

5.0 SPECIALIZED CONSTRUCTION PROCEDURES AND PLANS

5.1 HIGHWAY AND UTILITY CROSSINGS

The majority of the Project will be located within the existing CTDOT ROW and will cross a three local and state roadways. Prior to construction over these roadway corridors, UI will notify and, as necessary, coordinate with the representatives of ConnDOT, the affected utilities and municipal highway departments to identify any utility lines to be crossed by the proposed facilities.

Notification will be given to affected highway departments and utilities before construction over the road or utilities.

5.2 CULTURAL RESOURCE PROTECTION PROCEDURES

5.2.1 *CULTURAL RESOURCE SURVEYS*

Based on a review of the project area, along with documentation from the Connecticut State Historic Preservation Officer, no adverse effects to both historic and archeological properties will occur. See Appendix J.

5.2.2 *UNANTICIPATED DISCOVERIES PLAN*

In the event undocumented cultural resources are encountered during construction, the construction Contractor will stop all work in the immediate area and notify an EI. The EI will contact the appropriate party to perform the required investigation/evaluation. While the matter is being resolved with the appropriate agencies, the EI will isolate the area and instruct the Contractor that construction is not permitted in the immediate area of the find. Construction outside the immediate area of the find may continue.

6.0 ENVIRONMENTAL INSPECTION

6.1 UI'S ENVIRONMENTAL COMPLIANCE PROGRAM

The transmission line construction contractor(s) will be obligated to comply with all applicable State and Federal environmental requirements, as well as conditions outlined within this D&M Plan. To verify the contractor's compliance with this D&M Plan and the environmental requirements during construction outlined in Appendices F through J, a UI Environmental Analyst has been assigned to the project. Along with the UI Environmental Analyst, UI will have an Environmental Inspector monitoring the following:

- 1) Installation of sediment and erosion controls,
- 2) Maintenance of sediment and erosion controls,
- 3) Adherence to ACOE permit conditions,
- 4) Endangered, threatened and special concern species,

7.0 NOTICES AND REPORTS

7.1 NOTICES TO THE CSC: START AND COMPLETION OF CONSTRUCTION

UI will provide written notification to the CSC a minimum of two weeks in advance of each of the following:

- The commencement of vegetation clearing along the transmission line,
- The commencement of transmission line construction.
- The completion of transmission line construction (including site restoration/ rehabilitation).

UI will provide written notification to seek approval from the CSC regarding the location and size of all areas to be accessed or used for staging and not otherwise included in this D&M Plan.

A final report for the Project work will be provided to the CSC not later than 180 days after completion of all construction and rehabilitation work.

7.2 PROPOSED REVISIONS TO THE D&M PLAN

7.2.1 D&M PLAN CHANGES REQUIRING NOTICE TO THE CSC

Pursuant to RCSA Section 16-50j-62(b)(2), the CSC must pre-approve any significant changes to this D&M Plan. UI will identify, track, and submit all significant changes. *No significant changes to this D&M Plan will be implemented without such documented approvals.*

UI will provide the CSC with advance written notice whenever a significant change of the approved D&M Plan is necessary. If advance written notice is impractical, UI will provide immediate verbal notice to the CSC, followed by written notice no later than 48 hours after the verbal notice.

CSA Section 16-50j-62(b)(2) defines a “significant” change to the approved D&M Plan as including, but not limited to:

- The location of a wetland or watercourse crossing;
- The location of an access way or structure in a regulated wetland or watercourse area;
- The construction or placement of any temporary structures or equipment;

- A change in structure type, or location including, but not limited to, towers, guy wires, associated equipment or other facility structures; or
- Use of additional mitigation measures or elimination of mitigation measures.

In addition to the above criteria, UI proposes to define a “significant” Project change as one that would substantially reduce the amount of protection to the environment, substantially increase potential public concern, or would otherwise potentially result in a meaningful effect on the environment, the public, or other Project permits and approvals.

8.0 COMMUNITY OUTREACH

8.1 COMMUNITY OUTREACH PRIOR TO CONSTRUCTION

UI will provide notice of the D&M plan filing to the property owners of record. UI is in the process of consulting with the Chief Elected Officials (CEOs), or their designee, in the City of Milford. UI is providing a courtesy copy of the D&M Plan to officials of Milford. There are no parties to CSC's proceeding regarding the Project (CSC Petition No. 1110 & 1151) other than UI as petitioner.

APPENDIX A
CSC RULING



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

August 22, 2014

Richard J. Reed, PMP
Vice President-Engineering & Project Excellence
The United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477-3629

RE: **PETITION NO. 1110** - The United Illuminating Company petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed Milford 115-kV transmission line upgrade project consisting of the northern and southern sections of 115-kV lines extending from Milvon Substation to Devon Tie Switching Station in Milford, Connecticut.

Dear Mr. Reed:

At a public meeting held on August 21, 2014, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need with the condition that the petitioner submit a Development and Management Plan for this project.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated July 7, 2014.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,

A handwritten signature in blue ink that reads "Robert Stein" with the initials "NAB" written to the right.

Robert Stein
Chairman

RS/CDM/lm

Enclosure: Staff Report dated August 21, 2014

c: The Honorable Benjamin G. Blake, Mayor, City of Milford
David Sulkis, City Planner, City of Milford
Bodhan Katreczko, UI
Bruce L. McDermott, Esq., UIL Holdings Corporation



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

Petition No. 1110

The United Illuminating Company

Milford, Connecticut

Staff Report

August 21, 2014

On July 14, 2014, the Connecticut Siting Council (Council) received a petition from The United Illuminating Company (UI) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for its proposed Milford 115-kV Transmission Line Upgrade Project. This project would replace transmission structures along a portion of two lines between Milvon Substation and Devon-Tie Switching Station, a distance of approximately 1.3 miles. Council members Phil Ashton, Michael Caron and Robert Hannon and Council staff member David Martin conducted a field review of this proposal on August 5, 2014. Chris Hughes, Shawn Crosbie, Bruce McDermott, Yan Lachowicz, Samantha Crowley, and Bohdan Katreczko represented UI at the field review. For the field review, Council members, staff and UI representatives met at Milvon Substation and then drove west along the route of the proposed pole replacement project to the Devon station, stopping at several vantage points along the way.

UI's transmission line upgrade project would affect two existing transmission lines: the 88005A line and the 89005B line. Both lines in the project area are currently located on catenary structures within the Metro North/Connecticut DOT railroad right-of-way; the 88005A line is on the north side of the railroad, and the 89005B line is on the south side of the railroad. The catenary structures are over 100 years old, and UI installed its transmission lines onto these structures during the early 1940s. UI would relocate its lines from the catenary structures onto new tubular steel monopoles that would be offset 15 to 30 feet from the edge of the rail lines, but still within the existing railroad right-of-way.

The upgrade project is necessitated by the need to increase the thermal capacity of the two lines, a determination made as part of the 2011 Southwest Connecticut Needs Assessment Report — a study completed by UI, CL&P, and ISO-NE to measure the reliability of southwest Connecticut's existing grid using NERC, NPCC, and ISO-NE standards and criteria. Due to their age and physical limitations, the existing line support structures are inadequate for the higher capacity conductors needed. The Upgrade Project would also have the advantage of separating UI's transmission infrastructure from the railroad's infrastructure. This would obviate or reduce the necessity of UI coordinating its outages to accommodate the needs of the railroad corridor and vice versa. The structure replacement project would also make maintenance of the two different transmission systems easier for both parties.

For the 88005A line on the north side of the railroad, UI would replace its 34 existing structures with 21 new galvanized steel tubular monopoles. On the south side of the railroad, UI would replace its 34 existing structures with 23 new galvanized steel tubular monopoles. Council members asked whether it would be possible to use weathering steel instead of galvanized steel. UI responded by saying it had looked into the use of weathering steel but had some concerns about how the diesel-fueled freight trains on the railroad would affect the steel.

During the field review, UI indicated that the new monopoles to be installed would be designed to accommodate larger capacity conductors in case they were needed at some time in the future. Council members asked why the larger capacity conductors couldn't be installed as part of this project in order to save money, as the cost of any future installation would most likely be much higher than what today's costs are. UI representatives said they could look into the possibility of installing the higher capacity conductors as part of this project.



As a follow-up to the field review, UI did look into the two questions about the installation of larger capacity conductors and the use of weathering steel instead of galvanized steel. Regarding the conductor size, UI concluded that the proposed conductor would be sufficient beyond its ten-year planning horizon. Installing the larger conductor could result in the additional costs being considered a localized cost for Connecticut rate payers whereas the costs of the proposed conductor could most likely be regionalized throughout New England. Regarding weathering versus galvanized steel, UI's experience has been that life expectancy of the two materials is about the same, but that maintenance costs for galvanized steel are typically less than those of weathering steel. This is particularly true when the costs of graffiti removal are considered. Removal of graffiti from weathering steel poles could compromise their protective weathered layer and expose areas to accelerated corrosion.

The environmental impacts of the upgrade project should be limited. Most of the work would occur within the existing railroad right-of-way, which is located in a heavily developed corridor in close proximity to I-95. There are some wetlands in the vicinity of the project area, but the area that will be most directly affected is a small wetland area between the Milvon Substation and the rail corridor that UI will have to cross to do some of its project work. UI will deploy temporary wetland matting in this area to minimize any long-term impacts.

During the project, UI will deploy erosion and sedimentation control measures and will adhere to Eastern box turtle and Peregrine Falcon protection protocols prescribed by the CT DEEP Wildlife Division. Visual impact will be minimal as the completed project should look much like the rail corridor looks currently. UI submitted a preliminary archaeological assessment of its project for SHPO's review. SHPO determined that the project would have no adverse effects on historical properties.

Electric and magnetic field (EMF) levels associated with the affected lines are expected to increase slightly after completion of the project — by approximately 1 %. Resulting EMF levels would still be far below established health and safety standards.

UI notified local municipal officials and abutting property owners of its intended project. The City of Milford responded to UI's notification with a letter stating that it did not object to the project as it would strengthen the electrical system in the area.

UI would start construction of this project during the second quarter of 2015 and would anticipate it to be complete by the end of 2016.

Council staff recommends approval with the condition that UI submit a Development and Management Plan for this project.

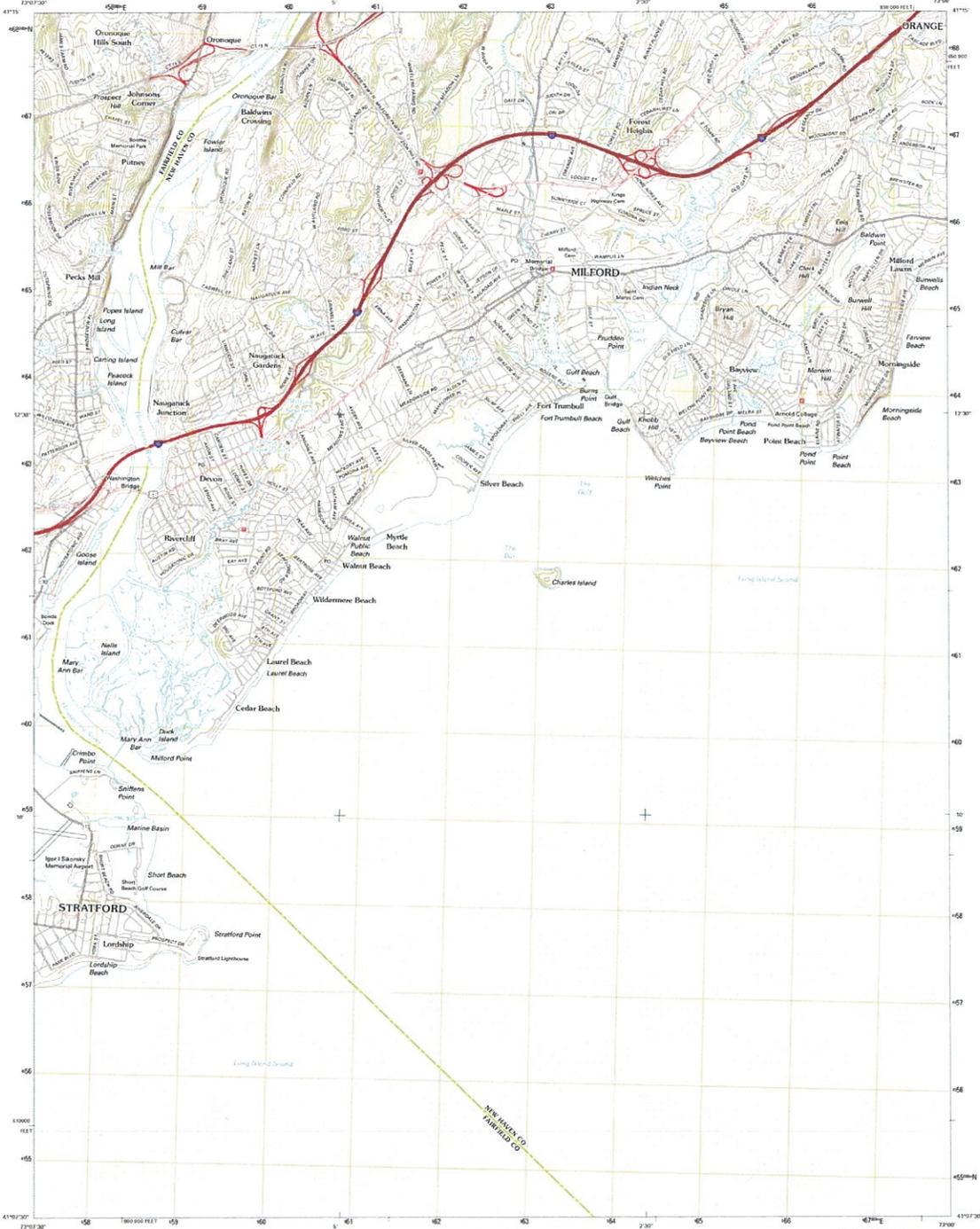
APPENDIX B
USGS TOPOGRAPHIC QUADRANGLE LOCUS MAPS



U.S. DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

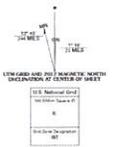


MILFORD QUADRANGLE
CONNECTICUT
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
North American Vertical Datum of 1988 (NAVD88). Projection and
Scale: UTM Zone 18N, Datum: North American Datum, Zone: 18N,
Scale: 1:24,000. UTM Zone 18N, Datum: North American Datum, Zone: 18N,
Scale: 1:24,000. UTM Zone 18N, Datum: North American Datum, Zone: 18N,
Scale: 1:24,000.

Imagery: NAIP, August 2010
Data: ©2010-2011 TerraFrame
Names: GNIS, 2011
Hydrography: National Hydrography Dataset, 2010
Contour: National Elevation Dataset, 2012
Boundaries: Census: B2010, USGS, 1972-2010



SCALE 1:24 000
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Demand, 2011.
A metadata file associated with this product is available at 8.2.



ROAD CLASSIFICATION

Interstate Road	State Road
US Route	Local Road
Trail	ATV
Proposed Road	Proposed
	Subsidence

MILFORD, CT
2012

APPENDIX C
LAYDOWN AREA & PLAN DRAWINGS



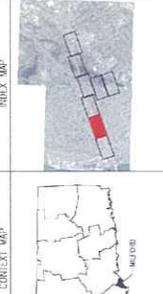
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 THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONTROLS FROM THE LOCAL GOVERNMENT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONTROLS FROM THE LOCAL GOVERNMENT.

- NEW SPECIAL FLOOD HAZARD AREAS
- NATURAL EXCESS FLOOD DAMAGE INDEX AREA
- EXISTING ACCESS ROADS
- CONSTRUCTION AREA
- OCCUPATION AREA
- VEGETATION CLEARANCE
- WETLAND IMPACT AREA

- ARTICULATED
- LEFT OF RIGHT-OF-WAY
- FEASIBLE FOR USE
- VEGETATION IMPACT
- VEGETATION CLEARANCE
- PROPOSED STRUCTURE

- UNDERGROUND ELECTRIC LINE
- GAS LINE
- SEWER
- STORM WATER
- FIBER OPTIC TELECOMMUNICATIONS LINE
- WATER LINE
- SLURRY CONCRETE PILE

- ALL CONSTRUCTION RIGHT-OF-WAY
- CONTRACT LINE
- PROPERTY LINE
- PROPERTY LINE OF RIGHT-OF-WAY
- CONTRACT LINE OF RIGHT-OF-WAY
- CONSTRUCTION POINT



LEGEND

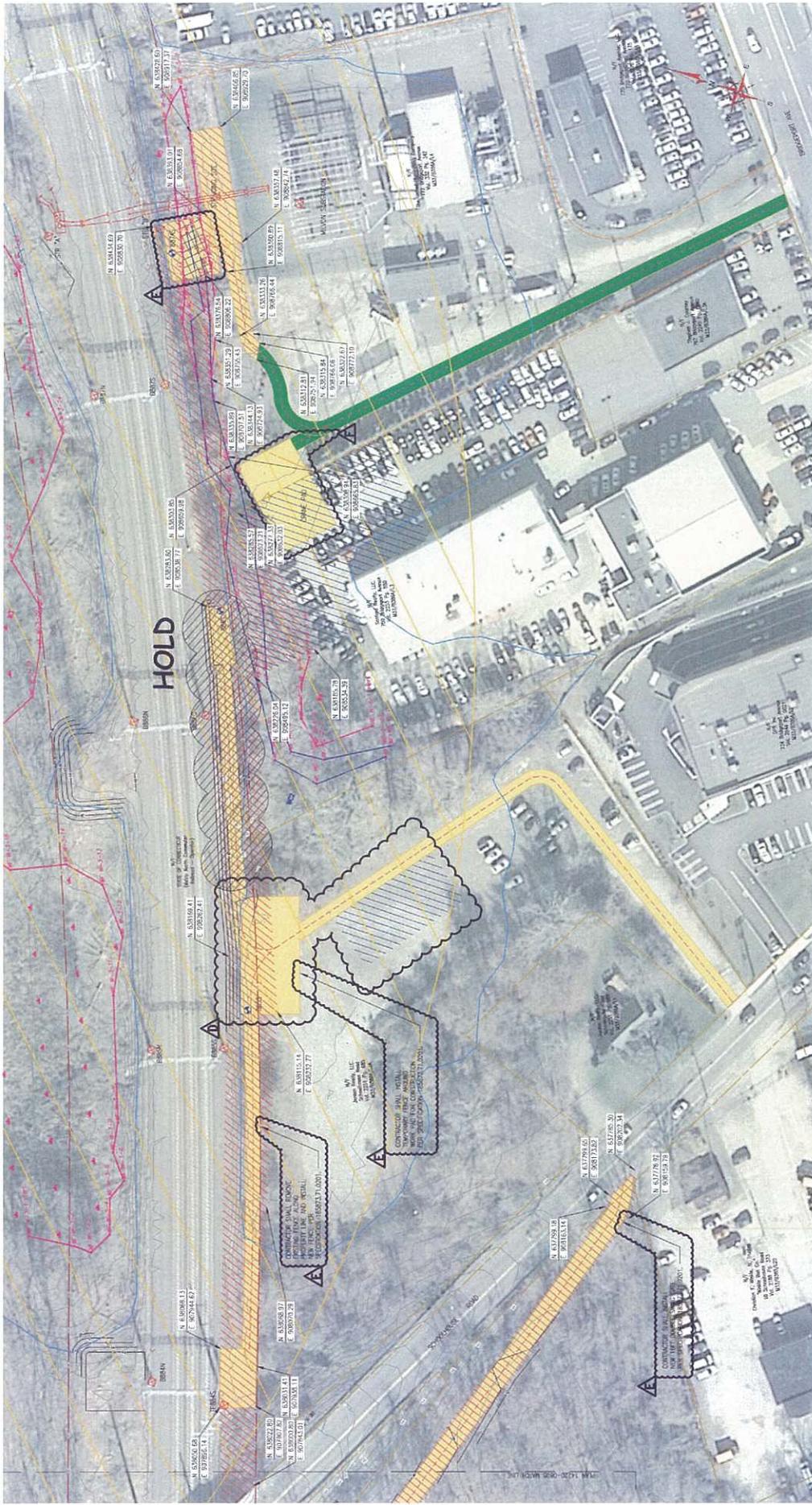
115KV TRANSMISSION LINE
 GENERAL ACCESS PLAN
 86685 TO 8715

Scale: 1" = 40'
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 Design: _____
 Checked: _____
 Entered: _____
 Plotted: _____

ALL BACKCIRCLES PER 90%

NO.	DATE	BY	CHKD.	REVISION
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2	08/07/2014	ELJ		ISSUED FOR CONSTRUCTION

BLACK & VEATCH
 Building a world of difference



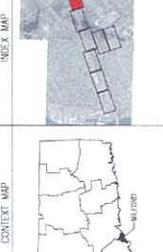
APPROVED FOR CONSTRUCTION
 THE DESIGNATION AND LIST OF THE NATIVE PLANTS AND ANIMALS SHOWN ON THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY CONTROLLED VEGETATION.

- FEMA SPECIAL FLOOD HAZARD AREAS
- MEDIAN EMERGENCY BARBERS (MORB) AREA
- EXISTING ACCESS ROAD
- CONSTRUCTION AREA
- OCCUPANCY AREA
- VEGETATION CHANGES
- RETAINMENT WALL AREA

- WATERCOURSE
- LIMIT OF RETAINMENT
- PERM TOY YARD
- RETAINMENT/WALL
- VEHICLE PARK
- EXISTING STRUCTURE
- PROPOSED STRUCTURE

- UNDERGROUND ELECTRIC LINE
- CEAS LINE
- SANITARY SEWER
- STORM SEWER
- FIBER OPTIC FELLOWSHIP/CONCATENATING LINE
- WATER LINE
- SAFETY CONTROL POINT

- ALL CONSTRUCTION TRAFFIC
- TRUCK LINE
- UT PROPERTY LINE
- PROPERTY LINE
- BOUNDARY EDGE OF RIGHT-OF-WAY
- EASEMENT
- CONSTRUCTION WALL



115KV TRANSMISSION LINE
 GENERAL ACCESS PLAN
 IPB845 TO MILTON

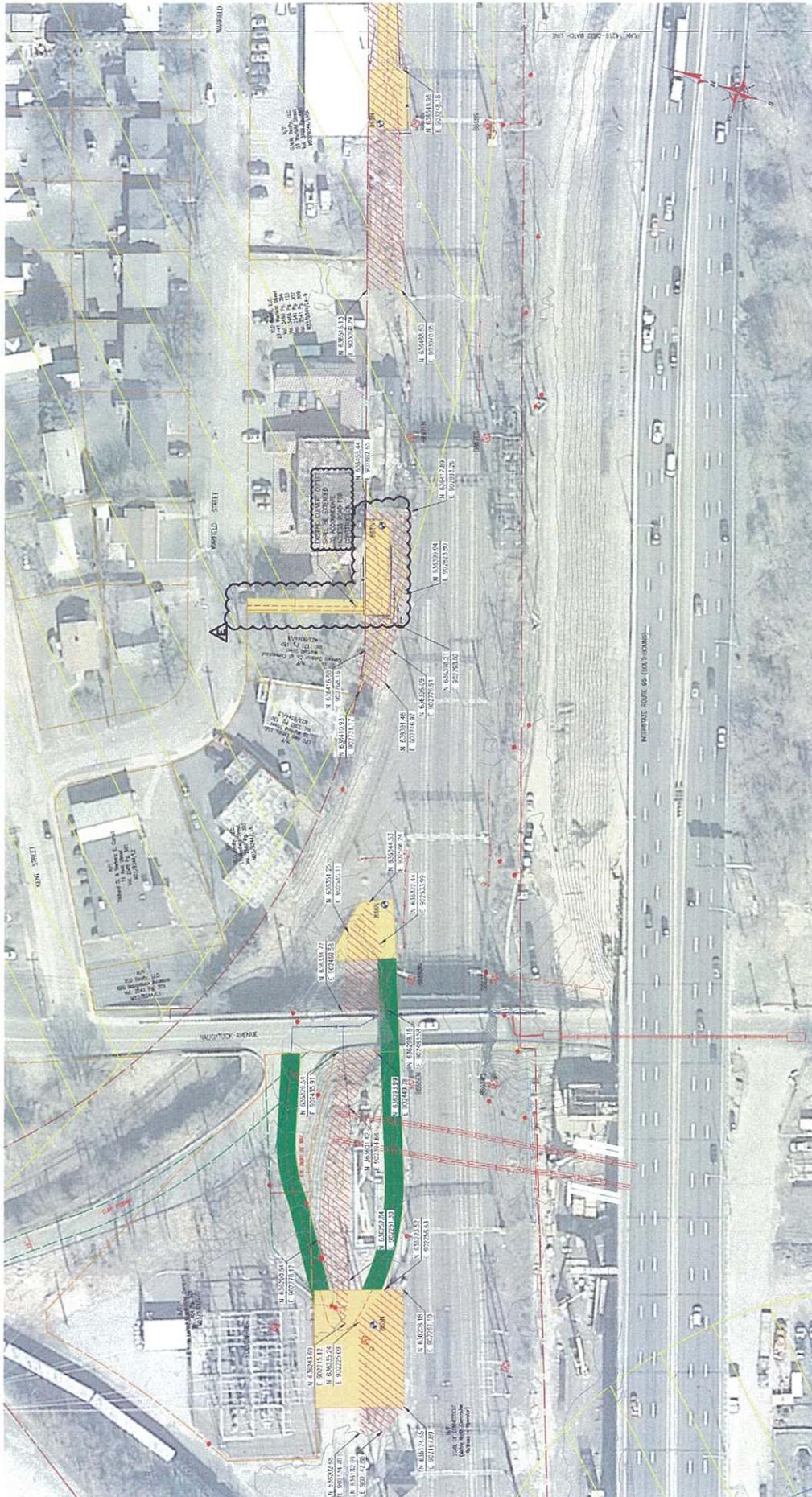
The United Illuminating Company

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Drawn: [Name]	Checked: [Name]
By: [Name]	Design: [Name]

ALL BACKCIRCLES PER 90%

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5	09/07/2014	ELJ	PROJECT 148533
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8	09/07/2014	ELJ	PROJECT 148533
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10	09/07/2014	ELJ	PROJECT 148533

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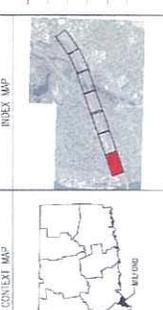
APPROVED FOR CONSTRUCTION
 FOR THE USE OF THE USER ONLY. THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY ALL INFORMATION CONTAINED HEREIN AGAINST THE LATEST CONTROLLED VERSION.



- SPECIAL FLOOD HAZARD AREAS
- NATURAL OBSTACLE DANGER ZONE AREA
- EXISTING ACCESS ROAD
- CONSTRUCTION AREA
- OCCUPATION AREA
- VEGETATION CLEARANCE
- RELAY IMPACT AREA

- UNDERGROUND
- LIMIT OF UTILITIES
- LIMIT OF RIGHT-OF-WAY
- UNDERGROUND ELECTRIC LINE
- SIGNALING SYSTEM
- FIBER OPTIC TELECOMMUNICATIONS LINE
- SEWER CONTROL POINT

- ALL CONSTRUCTION TRAFFIC
- DOWN LANE
- PRIORITY LANE
- PROPERTY LANE
- BLANKET TRIP OF RIGHT-OF-WAY
- EASTWEST
- CONSTRUCTION AREA



115KV TRANSMISSION LINE
 GENERAL ACCESS PLAN
 DEVON TIE TO 869N

DATE: 11/14/24
 DESIGNER: [Name]
 CHECKED: [Name]
 DRAWN: [Name]

NO.	DATE	REVISION

ALL BACKCIRCLES PER 90%

NO.	DATE	ISSUE FOR THE REVIEW	REVISION
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2	11/14/24	ISSUE FOR THE REVIEW	REVISION
3	11/14/24	ISSUE FOR THE REVIEW	REVISION
4	11/14/24	ISSUE FOR THE REVIEW	REVISION
5	11/14/24	ISSUE FOR THE REVIEW	REVISION
6	11/14/24	ISSUE FOR THE REVIEW	REVISION
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8	11/14/24	ISSUE FOR THE REVIEW	REVISION
9	11/14/24	ISSUE FOR THE REVIEW	REVISION
10	11/14/24	ISSUE FOR THE REVIEW	REVISION

BLACK & VEATCH
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PROJECT: 115KV
 DATE: 11/14/24



APPROVED FOR CONSTRUCTION
 THE DISTRIBUTION AND USE OF THE MAP, THE INFORMATION AND DATA CONTAINED HEREIN, IS UNCONTROLLED. THE USER SHALL VERIFY THE ACCURACY AND COMPLETENESS OF THE DATA CONTROLLED VERSION.

Legend:

- RAW SPECIAL FLOOD HAZARD AREAS
- NATURAL ENERGY BARRIERS (NEBA) AREA
- EXISTING ACCESS ROAD
- CONSTRUCTION AREA
- OCCUPATION AREA
- VIOLATION (C/S) MARK
- WETLAND BPHIC AREA

Legend:

- INTERSECTOR
- LINE OR WELLS
- FEED TO DECK
- WELLS/AVP/AVP
- VITAL POOL
- EXISTING STRUCTURE
- PROPOSED STRUCTURE

Legend:

- UNDERGROUND ELECTRIC LINE
- GAS LINE
- SEWER
- SEWER JUNCTION
- FIBER OPTIC TELECOMMUNICATIONS LINE
- WATER LINE
- SEWER CONTROL POINT

Legend:

- ALL CONSTRUCTION TRAFFIC
- TOWN LINE
- PROPERTY LINE
- MAIN ROAD USE OF RIGHT-OF-WAY
- EXISTING
- DISTRIBUTION TOWER



115KV TRANSMISSION LINE
 GENERAL ACCESS PLAN
 8866 TO MILVON

The United Illuminating Company

Drawn	Scale	Date	Design	Supv.
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By	Civil/Eng./Surv	Chd.		
Revised				
No	Date			

REFERENCE DRAWINGS:
 DRAWING INDEX 14219-0802
ALL BACKCIRCLES PER 90%

NO.	DATE	BY	CHKD.	DESCRIPTION
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3	02/10/2021	SKM	SKM	ISSUE FOR CONSTRUCTION - PROJECT PERMIT
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9	02/10/2021	SKM	SKM	ISSUE FOR CONSTRUCTION - PROJECT PERMIT
10	02/10/2021	SKM	SKM	ISSUE FOR CONSTRUCTION - PROJECT PERMIT

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 Building a world of infrastructure

APPENDIX D
D&M PLAN DIRECTORY

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
16-50j-60	Requirements for a D&M Plan	
(a)	<p>Purpose. The Council may require the preparation of full or partial D&M Plans for proposed energy facilities, modifications to existing energy facilities, or where the preparation of such a plan would help significantly in balancing the need for adequate and reliable utility services at the lowest reasonable cost to consumers with the need to protect the environment and the ecology of the state.</p>	This D&M Plan applies to the replacement of the Milvon to Devon Tie 115-kV overhead transmission lines and associated substation upgrades.
(b)	<p>When required. A partial or full D&M plan shall be prepared in accordance with this regulation and shall include the information described in RCSA Sections 16-50j-61 to 16-50j-62, inclusive, for any proposed energy facility for which the Council issues a certificate of environmental compatibility and public need, except where the Council provides otherwise at the time it issues the certificate. Relevant information in the Council's record may be referenced.</p>	This D&M Plan includes all information applicable to the structure replacement of the 115-kV transmission lines and associated substation upgrades.
(c)	<p>Procedure for preparation. The D&M plan shall be prepared by the certificate holder or the owner or operator of the proposed facility or modification to an existing facility. The preparer may consult with the staff of the Council to prepare the D&M plan.</p>	This D&M Plan was prepared by UI.
(d)	<p>Timing of plan. The D&M plan shall be submitted to the Council in one or more sections, and the Council shall approve, modify, or disapprove each section of the plan not later than 60 days after receipt of it. If the Council does not act to approve, modify or disapprove the plan or a section thereof within 60 days after receipt of it, the plan shall be deemed approved. Except as otherwise authorized by the Council, no clearing or construction shall begin prior to approval of applicable sections of the D&M plan by the Council.</p>	This D&M Plan addresses the Council's requirements for the replacement of the 115-kV transmission line structures except for the list of contractor personnel as specified in Section 16-50j-61(c)(8). Contact information for the prime contractor(s) for the transmission line work will be provided to the Council in a supplemental submission, after contract award, prior to the commencement of construction.
16-50j-61	Elements of D&M Plan	
(a)	<p>Key Map. 1"=2,000' USGS topographic map</p>	Appendix B
(b)	<p>Plan Drawings. 1"=40' or larger, and supporting documents, which shall contain the following information:</p>	Maps and cross-sections are included in Appendix C.
1.	Edges of the proposed site and any existing site contiguous to or crossing the site, portions of the site owned by the company in fee, and the identity of property owners of record of the portions of the site not owned by the company in fee	Appendix C

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
2.	Public roads and public land crossings or adjoining the site	Appendix B and Appendix C
3.	Location of 50' contours along the site	Appendix B and Appendix C
4.	Probable location, type, and height of the proposed facility and components including each new transmission structure, position of guys, description of foundations, and locations of any utility or other structures to remain on the site or to be removed	Appendix C
5.	Probable points of access to the site, and the route and likely nature of accessways, including alternatives	Appendix C
6.	Edges of existing and proposed clearing areas, the type of proposed clearing along each part of the site, and the location and species identification of vegetation that would remain for aesthetic and wildlife value	Section 3.5; Appendix C, and Appendix H
7.	Identification of sensitive areas and conditions within and adjoining the site, including but not limited to:	
	A. Wetland and watercourse areas regulated under C.G.S. Chapter 440 and any locations where construction may create drainage problems	Section 3.7; Appendix C
	B. Areas of high erosion potential	Sections 3.6 and 3.8; Appendix G
	C. Critical habitats or areas identified as having rare, endangered, or threatened, or special concern plant or animal species listed by the state or federal government	Section 3.7.2, and Appendix H
	D. Location of known underground utilities or resources to be crossed (electric lines, fuel lines, drainage systems and natural or artificial public or private water resources)	Appendix C
	E. Residences or businesses within or adjoining the site that may be disrupted during construction	Appendix C
	F. Significant environmental, historic and ecological features (significantly large or old trees, buildings, monuments, stone walls or features of local interest)	Section 5.2; Appendix J
(c)	Supplemental Information	
1.	Plans (if any) to salvage marketable timber, restore habitat and maintain snag trees within or adjoining the site	Section 3.9.1; Appendix H
2.	All construction and rehabilitation procedures with reasonable mitigation that shall be taken to protect areas and conditions identified in 7(b), above, including but not limited to:	
	A. Construction techniques at wetland and watercourse crossings	Section 3.7.1; Appendix C
	B. S&E control and rehabilitation procedures, consistent with the CT Guidelines for Soil Erosion and Sediment Control, as updated and amended for areas of high erosion potential	Sections 3.6 and Section 3.8.2; Appendix G

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
	C. Precautions and all reasonable mitigation measures to be taken in areas within or adjoining the site to minimize any adverse impacts of such actions or modifications endangered, threatened, or special concern plant or animal species listed by federal or state agencies and critical habitats that are in compliance with federal and state recommended standards and guidelines, as amended	Section 3.7.2; Appendix H
	D. Plans for modification and rehabilitation of surface, drainage, and other hydrologic features	Section 3.8; Appendix C and BMPs
	E. Plans for watercourse bank restoration in accordance with Chapter 440 of the C.G.S.	Section 3.8; Appendix C and BMPs
	F. Plans for the protection of historic and archaeological resources with review and comment from a state historic preservation officer of the CT Department of Economic and Community Development (DECD) or its successor agency	Section 2.2; Appendix J
3.	Plans for the method and type of vegetation clearing and maintenance to be used within or adjacent to the site	Section 3.5
4.	Location of public recreation areas or activities known to exist or being proposed in or adjacent to the site, together with copies of agreements between the company and public agencies authorizing the public recreation use of the site to the extent of the company's rights thereto	Appendix C
5.	Plans for ultimate disposal of excess excavated material, stump removal, and periodic maintenance of the site	Sections 3.5
6.	Locations of areas where blasting is anticipated	None
7.	Rehabilitation plans, including but not limited to reseeding and topsoil restoration	Section 3.9; Appendix G
8.	Contact information for the project team	Appendix K
9.	Such site-specific information as the CSC may require	
(d)	<p>Notice</p> <p>A copy, or notice of the filing, of the D&M Plan, or a copy, or notice of the filing of any changes to the D&M Plan, or any section thereof, shall be provided to the service list and the property owner of record, if applicable, at the same time the plan, or any section thereof, is submitted to the CSC</p>	Section 7.0
(e)	<p>Changes to the Plan</p> <p>The CSC may order changes to the D&M plan, including but not limited to vegetative screening, paint color, or fence design at any time during the preparation of the plan</p>	Section 7.2

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
16-50j-62	Supplemental Reporting Requirements	
(a)	<p>Site Testing and Staging Areas. The certificate holder, or facility owner or operator, shall provide the CSC with written notice of the location and size of all areas to be accessed or used for site testing or staging areas. If such an area is to be used prior to approval of the D&M plan, the CSC may approve such use on terms as it deems appropriate.</p>	Section 3.4; Appendix C
(b)	Notice.	
1.	<p>The certificate holder, or facility owner or operator, shall provide the CSC, in writing with a minimum of two weeks advance notice of the beginning of:</p> <ul style="list-style-type: none"> A. Clearing and access work in each successive portion of the site, and B. Facility construction in that same portion 	Sections 2.0 and 7.1
2.	<p>The certificate holder, or facility owner or operator, shall provide the CSC with advance written notice whenever a significant change of the approved D&M plan is necessary. If advance written notice is impractical, verbal notice shall be provided to the CSC immediately and shall be followed by written notice not later than 48 hours after the verbal notice. Significant changes to the approved D&M plan shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> A. The location of wetland or watercourse crossing B. The location of an accessway or structure in a regulated wetland or watercourse area C. The construction or placement of any temporary structures or equipment D. A change in structure type or location including, but not limited to, towers, guy wires, associated equipment or other facility structures E. Utilization of additional mitigation measure, or elimination of mitigation measures. The CSC or its designee shall promptly review the changes and shall approve, modify, or disapprove the changes in accordance with subsection (d) of Section 16-50j-60 of the RCSA 	Section 7.2
3.	<p>The certificate holder, or facility owner or operator, shall provide the CSC with a monthly construction progress report or a construction progress report at intervals determined by the CSC or its designee, indicating changes and deviations from the approved D&M Plan. The CSC may approve changes and deviations, request corrections, or require mitigation measures.</p>	Section 7.1
4.	<p>The certificate holder, or facility owner or operator, shall provide the CSC with written notice of completion of construction and site rehabilitation.</p>	Section 7.1

R.C.S.A Section	Description	D&M Plan (Section Reference, as Applicable)
(c)	<p>Final Report The certificate holder, or facility owner or operator, shall provide the CSC with a final report for the facility not later than 180 days after completion of all site construction and site rehabilitation. The report shall identify:</p>	Section 7.1
1.	All agreements with abutters or other property owners regarding special maintenance precautions	
2.	Significant changes of the D&M plan that were required because of property rights of underlying and adjoining owners for other reasons	
3.	The location of construction materials which have been left in place including, but not limited to, culverts, erosion control structures along watercourses and steep slopes, and corduroy roads in regulated wetlands	
4.	The location of areas where special planting and reseeding have been done	
5.	<p>The actual construction cost of the facility, including but not limited to the following costs:</p> <p>A. Clearing and access</p> <p>B. Construction of the facility and associated equipment</p> <p>C. Rehabilitation; and</p> <p>D. Property acquisition for the site or access to the site</p>	
(d)	<p>Protective Order The certificate holder, or facility owner or operator, may file a motion for protective order pertaining to commercial or financial information related to the site or access to the site.</p>	N/A

APPENDIX E
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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

November 17, 2014

Regulatory Division
CENAE-R

Mr. Shawn Crosbie
United Illuminating Co
180 Marsh Hill Road
Orange, CT 06477

Dear Mr. Crosbie:

Project Name & Location of work: temporary swamp mats/772 Bridgeport Avenue, Milford, CT

We received your Connecticut General Permit (CT GP) Appendix 1A form indicating that you plan to conduct work within our jurisdiction under Category 1 of the GP. We have assigned this file number NAE-2014-2326. Please reference this number in any future correspondence with us.

We have recorded this project as permittee self-certification of Category 1 of the CT GP in our database. You are responsible for ensuring the work meets the terms and conditions of the CT GP.

If you have any questions, please contact me at 978-318-8879.

A handwritten signature in cursive script, reading "Robert J. DeSista", is located in the lower right quadrant of the page.

for Robert J. DeSista
Chief, Permits & Enforcement Branch

APPENDIX F
STORMWATER POLLUTION CONTROL PLAN

Stormwater Pollution Control Plan

Milvon-Devon Project

The United Illuminating Company/
Metro North Linear Rail Project

September 2014



56 Quarry Road
Trumbull, Connecticut 06611

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1 Drainage Basin Map

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- A CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities Registration Form and General Permit
- B Identification of Contractor and Certification Statements
- C Construction Drawings
- D Wetland Identification and Delineation Report
- E Construction Sequencing
- F Notice of Termination Form
- G Sedimentation and Erosion Control Inspection Report Form
- H Stormwater Monitoring Report Form (Turbidity Sampling Data)

1 Introduction

This Stormwater Pollution Control Plan is required as part of the registration process under the *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* (General Permit), dated August 21, 2013.

The Milvon-Devon Project, herein referred to as Milvon-Devon, is considered a construction activity in accordance with the Connecticut Department of Energy and Environmental Protection (CT DEEP) General Permit. The purpose of this plan is to specify parameters to follow to minimize pollution caused by use of the project sites during and after construction is completed. Erosion and sediment control requirements are also shown on the plans. Location map of the project sites along Milvon-Devon can be found in *Attachment A* of the General Permit Registration Form, under *Appendix A* of this plan.

During construction, the contractor(s) shall be responsible for implementing all elements of the erosion and sedimentation control measures as defined on the drawings and in this plan. Major construction activities will be phased to minimize areas of disturbance throughout construction. Erosion and sedimentation controls will be implemented and adjusted as needed throughout construction to minimize soil erosion.

Throughout the construction process, the Permittee or Permittee's agent shall periodically inspect all erosion control measures. A monitoring program will be put in place to observe potential off-site impacts due to erosion. After construction, the Permittee shall be responsible for maintaining these erosion and sedimentation control measures. The Milvon-Devon Project will not be considered complete until all disturbed areas have been satisfactorily stabilized for at least three months, all erosion has been repaired, and all temporary erosion control measures have been removed as called for on the plans.

The general contractor(s) and subcontractor(s) will be required to sign the certification statement located in *Appendix B* of this plan.

2 Site Description

The United Illuminating Company (UI) will be conducting construction activities along a section of the Metro-North Railroad Line east of the Housatonic River in Milford, Connecticut. The contiguous section will be considered as a single linear redevelopment project. Milvon-Devon consists of constructing 43 transmission towers and updating 4 transmission towers at several locations along approximately two miles of railroad.

The goal of the overall project is for UI to gain independence of their electrical transmission lines from the Metro-North Railroad overhead catenary system by installing elevated stanchions to carry the electrical transmission lines. The work at Milvon-Devon involves constructing a steel monopole tower at each site for the UI transmission lines that run along the railroad. This work includes installing a new concrete base and monopole for the tower at each site, and relocating the wires from the existing catenary tower structures to the new UI dedicated monopole.

The work will take place on an established railroad bed within the Metro-North Railroad Right-of-Way. Work areas, areas of occupation, and areas of selective and limited clearing are highlighted in the Construction Drawings found in *Appendix C*.

2.1 Scope of Construction Activities

The proposed construction activities at each work site along Milvon-Devon include the following:

- Establishing erosion and sedimentation controls
- Conducting selective/ limited clearing
- Installing access roads
- Installing tower foundations
- Installing steel pole tower and transferring wires
- Modifying wire connections to existing structures

2.2 Area of Disturbance

The total disturbed area for the Milvon-Devon project will be approximately 12.29 acres, spread across the 47 work sites which include construction of 43 transmission towers and updating 4 transmission towers.

Two of the work sites contain a construction work pad area to be used for construction of two proposed tower locations. Therefore, disturbances associated with work pad areas for towers 864BSN and 887ANS are covered under disturbances for work pads associated with towers 865N and 887AS, respectively.

2.3 Stormwater Discharge Information

The Milvon-Devon project sites are all within the railroad right-of-way. A typical average runoff coefficient for the project is $C=0.40$, this is consistent for each work site throughout the project.

The majority of stormwater runoff generated at the sites infiltrates directly through the crushed stone of the railroad right-of-way. Surface runoff that does not infiltrate will sheet flow down and along the railroad embankment to abutting properties. The construction proposed will not alter the runoff coefficient of the project sites and will not promote channeled or areas of concentrated runoff. Existing drainage patterns will not change from pre to post construction activities.

Portions of the proposed activity are within the coastal boundaries delineated by CT DEEP. Documentation from the State of Connecticut Department of Public Utility Control showing the determination that the project is exempt from coastal site plan review is included in *Attachment B* of the General Permit Registration Form, under *Appendix A* of this plan.

Portions of the relevant Flood Insurance Rate Maps for the area of work can be found in the *Appendix D* of the *Wetland Identification and Delineation Report* for the Milvon-Devon project, prepared by BL Companies, Inc., included as *Appendix D* of this plan.

2.4 Receiving Waters

The Milvon-Devon project sites are located within the Housatonic Major Basin, as indicated within the *Public Water Supply Sources & Drainage Basins of Connecticut* mapping provided in *Figure 1* of this plan. No directly channeled or concentrated flow is anticipated from the project to the receiving waters.

2.5 Wetlands on Site

A *Wetland Identification and Delineation Report* for the Milvon-Devon project was prepared by BL Companies, Inc., and is included as *Appendix D* of this plan.

3 Construction Sequencing

The Contractor shall be aware that grubbing, stripping, and associated earthwork operations all have significant potential to cause erosion and sedimentation until complete stabilization of the site has occurred.

The project is proposed to be constructed at 47 separate sites along the railroad right-of-way. The project includes construction of 43 transmission towers and updating 4 transmission towers. Work is anticipated to begin April 2015 and conclude May 2016. The contractor shall minimize disturbances as much as possible in coordination with the Metro-North Railroad (Metro-North) and the Connecticut Department of Transportation (CT DOT). The contractor is held to the direction and schedule of CT DOT and Metro-North. Each proposed tower construction site disturbs at a maximum 50,450 square feet (1.16 acres) of impact. Normal working hours for the site will comply with Metro-North working standards.

Pre-Construction activities include obtaining required permits, authorizations, and approvals from State authorities, as well as private entities including the Permittee having jurisdiction over the Project. In addition, notifications to regulatory authorities will be made and copies of such permits, authorizations, approvals, and notifications will be provided to the Engineer.

The general Construction Sequencing for construction activities at each work site is attached as *Appendix E*

4 Control Measures

The following paragraphs address the controls and measures to be implemented on the work site both during and after construction to minimize stormwater pollution to the waters of the State of Connecticut. Control measures during construction activities are shown on the Erosion and Sedimentation Control Plan sheets within the Construction Drawings included as *Appendix C*.

4.1 Erosion and Sediment Controls

The goal of this plan is to control erosion on the site and to control movement of sediment into adjacent wetlands, watercourses or storm sewer systems. Note that erosion and sediment controls shall conform to the requirements of the *Connecticut Guidelines for Soil Erosion and Sediment Control*, dated May 2002, which will hereafter be referred to as the “Standards”, and the *2004 Connecticut Stormwater Quality Manual*, which will hereafter be referred to as the “Guidelines”. To meet these goals, stabilization, structural and maintenance practices shall be implemented by the Contractor as outlined below.

4.1.1 Stabilization Practices and Protection

Both temporary and permanent stabilization practices shall be implemented throughout the project to minimize erosion of soil from the disturbed site. Temporary and permanent stabilization measures are proposed to provide protection against erosion both during and after construction. Existing vegetation shall be preserved to the maximum extent practicable.

The contractor shall maintain silt fence and haybales until seeding/stabilization. When construction activities have permanently ceased or when final grades are reached on any portion of the sites, stabilization and protection practices shall be implemented when directed and permitted by Metro-North scheduling. Areas that will remain disturbed but inactive for at least 30 days shall receive temporary seeding or soil protection in accordance with the Guidelines once directed and permitted by Metro-North scheduling. Areas that will remain disturbed beyond the seeding season shall receive long term non-vegetative stabilization and protection measures sufficient to protect the site through the winter. In all cases, stabilization and protection measures shall be implemented as soon as possible in accordance with the Guidelines as well as CT DOT and Metro-North schedules.

The stabilization practices to be implemented during the construction of the proposed linear project are as follows:

Temporary Vegetative Cover: In coordination with Metro-North and CT DOT direction and schedules, all exposed areas that will be inactive for more than seven days, or immediately (as schedules allow) for stockpiles not to be used for 30 days, and areas that have not yet reached finished grades shall receive a temporary vegetative cover during the planting season of March 15 to July 1 and August 1 to October 15. This temporary vegetative cover shall consist of perennial rye grass. The rye grass shall be planted at a rate of 2 lbs./1,000 sq. ft. at a depth of ½ inch. Limestone (equivalent to be 50% calcium plus magnesium oxide) shall be applied as seedbed prepared at a rate of 90 lbs./1,000 sq. ft. Where grass predominates, fertilize according to a soil test at a minimum application rate of 1 lb. of nitrogen per ton, areas to be left bare before finish grading and seeding outside of planting seasons shall receive an air-dried woodchip mulch, free of coarse matter, treated with 12 lbs. of nitrogen per ton, applied at a rate of 185—275 lbs./1,000 sq. ft.

Permanent Vegetative Cover: Once the planting season begins, temporary stabilization measures shall be removed and slopes shall be prepared and seeded. Seeding shall be in accordance with the technical specifications for the project. Seeding shall only occur between April 1 and June 1 and August 15 and October 15.

4.1.2 Structural Measures

Structural practices shall be implemented to control the movement of sediment and minimize any discharge of pollutants from the site, divert flows away from exposed soils, store flows, and limit runoff. The structural practices to be implemented during construction are as follows:

- **Geotextile Sediment Filter Fence:** To minimize the transport of sediment from the disturbed areas to receiving wetlands, geotextile sediment filter fence has been shown on the plans at select areas around the site to filter runoff from the disturbed areas. Geotextile sediment filter fence details and locations are provided on the drawings. A row of geotextile sediment filter fence shall be placed around stockpiles during stockpiling operations. Geotextile sediment filter fence shall be removed only when the entire site has been permanently stabilized.
- **Haybale Barriers:** To reduce velocity of stormwater traveling across the site, haybale barriers may be installed across the direction of high runoff flows. Haybale barriers shall remain as temporary measures during construction to protect downgradient disturbed surfaces during establishment.
- **Construction Entrance/ Anti-Tracking Pad:** To prevent soil or sediment from being carried off site by construction equipment, a construction entrance will be installed before construction traffic into and out of the project area. The width of the anti-tracking pad shall not be less than the width of the ingress or egress. Adjacent roadways shall be swept daily to remove material that may be tracked onto pavement.

4.1.3 Maintenance

The erosion and sediment controls must be maintained in a condition that will protect waters of the State from pollution during site construction. The Contractor shall conduct the following maintenance to promote the proper performance of erosion and sediment control measures.

- **Temporary and Permanent Vegetation:** At any eroded areas, repair by filling to finished grades, replace vegetative support material and seed, fertilize and lime, as specified for temporary and permanent stabilization. Add additional mulch as required.
- **Pavement Sweeping:** Sweep surfaces adjacent to the construction entrances, the soil management areas, and designated haul routes daily. Properly dispose of sediment or debris collected during sweeping.
- **Silt Fence and Haybales:** Inspect silt fence and haybales immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs should be made immediately. Should the barrier decompose or become ineffective while the barrier is still needed, the barrier shall be replaced promptly. Sediment deposits should be removed when they reach approximately one-half the height of the barrier. Sediment shall be disposed of on-site as non-structural fill. Sediment deposits remaining in place after the silt fence or haybales is no longer required shall

be removed and placed in a stockpile surrounded by silt fence in a location suitable to the Permittee.

4.2 Dewatering Wastewaters

Dewatering on this site is anticipated. Dewatering shall be in accordance with the *Summary of Soil and Groundwater Characterization* dated June 2014. This report indicates that based on the conditions observed in the field and the results of the analytical analysis, it is recommend that groundwater generated within the areas of the following monitoring well locations be managed and characterized as specified in this report.

All dewatering activities will be in compliance with both state and federal guidance/regulations.

Where treatment is not required for dewatering, wastewater from dewatering pumps will be infiltrated into the ground where possible. Where this is impracticable, proper methods and devices shall be utilized to the extent permitted by law, such as pumping water into a temporary sedimentation depression, providing surge protection at the inlet and outlet of pumps, floating the intake of the pump, or other methods to minimize and retain the suspended soils. These wastewaters will not be discharged directly without treatment. If a pumping operation causes turbidity problems beyond the control of these measures, the operation shall cease until feasible means of controlling turbidity (e.g. discharge to the sanitary sewer) are determined and implemented.

4.3 Post-Construction Stormwater Management

4.3.1 Standards

Detailed erosion and sedimentation controls in accordance with the Guidelines have been proposed for this site. This system will protect the wetlands during and after construction until the site is stabilized. The water quality of runoff from the stabilized, developed site will be improved using widely accepted Best Management Practices (BMPs).

4.3.2 Control Measures

At the end of construction, areas disturbed by construction activities shall be stabilized. As a result, the potential for erosion at this site after construction is minimal. Crushed stone areas will also serve as a filter to remove sediment from runoff if permanently stabilized areas are properly maintained. Perimeter controls (i.e., silt fence) will be actively maintained until final stabilization of those portions of the site up-gradient of the perimeter control. Temporary perimeter controls will be removed after final stabilization.

No channeled or concentrated flow of runoff is expected to leave the project sites. The water quality rain event will infiltrate through the crushed stone of the railroad right-of-way, thus providing 100% removal of the total suspended solids (TSS) from stormwater runoff.

The contractor shall be responsible for cleaning all post-construction stormwater structures and removal of remaining silt fence before filing a termination notice, a copy of which is included as *Appendix F*. After filing the termination, maintenance and cleaning of the unit shall become the responsibility of the Permittee.

The design will meet the requirements of the Connecticut Stormwater Quality Manual, the Standards and Guidelines for Soil Erosion and Sediment Control, and federal stormwater regulations.

4.3.3 Redevelopment Project Performance Standards

The Milvon-Devon site surfacing consist of crushed stone railroad right-of-way, and an approximately 6' diameter concrete base for each of the 43 proposed towers. The proposed conditions will slightly increase impervious cover from the existing conditions. For this condition of existing imperviousness below 40%, the project would be designed to retain on-site the entire water quality volume from the proposed development, for each work area.

For linear redevelopment projects, the General Permit understands that site conditions such as the active railroad line could prevent complying with full water quality retention standards. No new stabilization or retention structures are proposed for the Milvon-Devon project. However, the water quality rain event will infiltrate through the existing crushed stone of the railroad right-of-way.

4.4 Other Controls

Good housekeeping will be maintained to minimize impacts of protected areas by pollutants, soil, and fugitive sediment.

4.4.1 Waste Disposal

The following BMPs shall be implemented to minimize the discharge of litter, debris, construction materials, hardened concrete waste, or similar materials to waters of the State.

- Construction waste will be removed from the site and disposed of legally.
- Waste will be removed from the site as soon as practical.
- Containers will be appropriate for the material stored.
- Where necessary, containers will be sealed/covered to prevent waste from escaping the container.
- Containers will only be located where approved by the engineer or regulatory agency.
- Waste storage areas shall be located, designed, and operated to prevent polluted runoff from leaving the waste storage area.
- Fences or covers shall be provided to prevent waste from blowing out of the waste storage area.

4.4.2 Construction Materials

Construction materials needed for this project will be properly stored in a neat and orderly manner until used. Construction materials shall not be stored outside of any buffers and at least 50 feet from any stream, wetland or other sensitive resource.

4.4.3 Washout Areas

Washout of applicators, containers, vehicles, and equipment for concrete, paint, and other materials shall be conducted in a designed washout area. There shall be no surface discharge of washout wastewaters from this area. To eliminate overflows during rainfall or after snowmelt all washwater shall be directed into a pit. This area shall be outside of any buffers and at least 50 feet from any stream, wetland, or other sensitive resource. The area shall be completely self-contained and clearly marked.

In addition, dumping of liquid wastes in storm sewers is prohibited. All wastes including hardened concrete waste from washouts shall be disposed of legally at an off-site location. At least once per week, all containers or pits used for washout should be inspected for structural integrity, adequate holding capacity, and to check for leaks or overflows. If any deficiencies are discovered, corrective action shall be taken immediately. Washout areas shall be emptied when levels reach $\frac{1}{2}$ the height of the container or pit.

4.4.4 Vehicle Tracking and Dust Control

As shown on the plans, a construction entrance shall be installed and maintained to prevent vehicles from tracking sediments onto City roads. The Contractor shall be responsible for performing dust suppression techniques during construction, including but not limited to:

- Spraying water or calcium chloride as necessary to control dust from construction activities. The volume of water sprayed for controlling dust shall be minimized so as to prevent runoff of water. No discharge of dust control water shall contain or cause a visible oil sheen, floating solids, visible discoloration, or foaming. Calcium chloride may also be used to control dust.
- Sweeping surfaces adjacent to the construction entrances and the soil management areas daily. The designated haul routes will be swept as required.

If at any time fugitive dust is observed to be generated from the construction site, the Contractor shall be responsible for employing additional dust suppression techniques to remedy the situation.

4.4.5 Chemical and Petroleum Products

All chemical and petroleum product containers stored on the site (excluding those contained within vehicles and equipment) shall be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or 10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area. Containers of 100 gallon capacity or more may be stored without a roof only if stored in a double-walled tank.

On-site vehicles shall be monitored for leaks and receive maintenance as needed. Metro-North will not permit the storage of equipment and vehicles on the work areas within the railroad right-of-way.

Equipment and vehicles will be refueled and stored overnight within the dedicated occupation areas shown on the plans.

4.4.6 Fertilizers

Fertilizers, if used in conjunction with the seeding operation, will be applied only in the amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered area. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

4.4.7 Spill Control Practices

The following practices shall be implemented during construction activities to mitigate spills of material and prevent their release to the waters of the State.

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- Spills will be cleaned up immediately after discovery.
- Spills of toxic or hazardous material will be reported to the appropriate State and local government agency, regardless of size.

5 Runoff Reduction and Low Impact Development (LID) Information

The majority of stormwater runoff generated at the sites infiltrates directly through the crushed stone of the railroad right-of-way. Surface runoff that does not infiltrate will sheet flow down and along the railroad embankment to abutting properties. The construction proposed will not alter the runoff coefficient of the project sites and will not promote channeled or areas of concentrated runoff. Existing drainage patterns will not change from pre to post construction activities. There will be no significant impacts to runoff peak flow rate or volume leaving the post construction site.

The *Wetland Identification and Delineation Report* included in *Appendix D* of this plan provides figures for the location of natural features, wetlands, drainage patterns, and soil information of the project site and surrounding areas. Impacts to the surroundings described in this report will be minimal. Limited vegetation clearing is required to access a portion of the Milvon-Devon work sites. The transmission towers installed at each work site will occupy approximately 30 square feet of surface area. No additional permanent impacts are anticipated from this project.

6 Inspections

6.1 Plan Implementation Inspections

Within the first 30 days following commencement of the construction activity on the sites, the permittee shall contact Fuss & O'Neill, who have been selected as the qualified soil erosion and sediment control professionals to inspect the sites. The sites shall be inspected at least once and no more than three times during the first 90 days to confirm compliance with the General Permit and proper initial implementation of all controls measures designated in the Plan for the sites for the initial phase of construction.

6.2 Routine Inspections

The Permittee shall routinely inspect the sites for compliance with the General Permit and the Plan until a Notice of Termination has been submitted. Inspection procedures for these routine inspections shall be addressed and implemented in the following manner: The Permittee shall maintain a rain gauge on-site to document rainfall amounts. The Permittee shall engage a qualified inspector (Fuss & O'Neill), to inspect the site at least once a week and within 24 hours of the end of a storm that generates a discharge. For storms that equal or exceed 0.5 inches that end on a weekend, holiday or other time after which normal working hours will not commence within 24 hours, an inspection is required within 24 hours. For storms of less than 0.5 inches, an inspection shall occur immediately upon the start of the subsequent normal working hours. Inspections of areas within the railroad right of way are dependent upon Metro North flagman scheduling. Where sites have been temporarily or finally stabilized, an inspection shall be conducted at least once every month for three months to confirm compliance with the General Permit. Inspections that involve access within the railroad right-of-way will be coordinated and scheduled with Metro-North to arrange a flagman.

The items to be inspected shall include, at a minimum, the following:

- Disturbed areas of the construction activity that have not been permanently stabilized
- All erosion and sediment control measures
- All structural control measures
- Stockpile areas
- Washout areas
- Drainage control facilities including diversion and perimeter drainage ditches
- Locations where vehicles enter or exit the site

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants leaving the work site. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be visually inspected to ascertain whether erosion control measures are effective in preventing significant impacts, such as turbidity to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

Based on the results of the inspection, the description of potential sources and pollution prevention measures identified in the plan shall be revised as appropriate by the Permittee or his agent as soon as practicable after such inspection.

A report shall be prepared for every inspection and retained as part of the plan. The report shall, at a minimum, summarizing the following;

- The scope of the inspection
- Name(s) and qualifications of personnel making the inspection
- Date(s) of the inspection
- Weather conditions including precipitation information
- Major observations relating to the implementation of the storm water pollution control plan
- Descriptions of the stormwater discharge(s) from the site
- Any water quality monitoring performed during the inspection
- Statement that, in the judgment of the qualified inspector(s), the site is either in compliance or out of compliance with the terms and conditions of the Plan and General Permit.

The report shall be signed by both the qualified inspector and the permittee or his/her authorized representative in accordance with the General Permit. A blank copy of the inspection report is provided in *Appendix G*.

If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance. During the period in which any corrective actions are being developed and have not yet been fully implemented, interim measures shall be implemented to minimize the potential for the discharge of pollutants to the site.

6.3 Corrective Actions

If at any time an inspection determines that the site is out of compliance with the terms and conditions of this Plan and the General Permit, corrective actions shall be taken. Non-engineered corrective actions (as identified in the Guidelines) shall be implemented on site within 24 hours and incorporated into a revised Plan within three calendar days of the date of inspection unless another schedule is specified in the Guidelines. Engineered corrective actions (as identified in the Guidelines) shall be implemented on site within seven days and incorporated into a revised Plan within ten calendar days of the date of inspection unless another schedule is specified in the Guidelines. Implementation of corrective actions for areas within the railroad right of way is dependent upon Metro North flagman scheduling.

7 Monitoring

Stormwater sampling is required for monitoring turbidity. Sampling shall occur on a monthly basis, during storm events that generate a discharge of stormwater from the site while construction activity is ongoing, until final stabilization of the drainage areas associated with each outfall is achieved. Sampling shall continue on a monthly basis until final stabilization of the drainage area associated with each outfall is achieved.

Sampling is only required during normal working hours, as defined by the General Permit. For this project, normal working hours will comply with Metro-North Railroad working standards. Sampling that involves access within the railroad right-of-way will be coordinated and scheduled with Metro-North to arrange a flagman. Sampling within the railroad right of way will be contingent upon having a flagman present. If sampling is discontinued due to the end of normal working hours, it shall be resumed the next working day as long as the discharge continues. Sampling may be temporality suspended if at any time conditions exist that may reasonable pose a threat to the safety of the person taking the sample (e.g. high winds, lighting, flooding, intense rainfall etc.). Sampling shall resume once the unsafe conditions are no longer present. If there is no stormwater discharge during a month, sampling is not required.

7.1 Monitoring Requirements

All samples shall be collected from discharges resulting from a storm event that occurs at least 24 hours after any previous storm event that generated a discharge. Sampling of snow or ice melt in the absence of a storm event is not a valid sample.

Samples shall be grab samples taken at least three separate times during a storm event. The samples shall be representative of the flow and characteristics of the discharge. The first sample shall be taken within the first hour of stormwater discharge from the site. In cases where discharges begin outside of normal working hours, the first sample shall be taken at the start of normal working hours. Sampling of areas within the railroad right of way is dependent upon Metro North flagman scheduling.

Sampling is required of areas of concentrated runoff of stormwater from disturbed areas. Sampling shall be done in accordance with 40 CFR Part 136/ASTM D1889-00. Sampling locations are shown on the Erosion and Sedimentation Control Plans found in the Construction Drawings of *Appendix C* and shall be identified in the field with a flag, stake, or other visible marker.

7.2 Monitoring Reports

The stormwater turbidity value for each sampling point shall be determined by taking the average of the turbidity values of all samples at that sampling point during a given storm. Any samples containing snow or ice melt must be noted. A blank copy of the stormwater monitoring report for submitting turbidity sampling data is provided in *Appendix H*.

Monitoring reports shall be submitted to CT DEEP in accordance with the provisions outlined in the General Permit.

7.3 Sampling Points

The plans showing the proposed sampling points are provided in *Appendix C*. The project is considered a linear project according to the General Permit. Based on similarities of exposed soils, slope, and stormwater controls used the project has 16 sampling points, 1 representative sampling point for approximately every three tower replacement sites along the Milvon-Devon project. Each sampling point was determined based on areas down gradient of proposed work areas. The proposed work does

not create new outfalls and will not promote channeled or concentrated flow. The monitor will review each work site and take a sample if concentrated runoff is observed leaving the work area.

The Sampling Points are numbered as follows:

- # 1–865N Location: Structure Number 865N
- # 2–871N Location: Structure Number 871N
- # 3–876N Location: Structure Number 876N
- # 4–878N Location: Structure Number 878N
- # 5–882AN Location: West of Structure Number 882AN
- # 6–887ANN Location: Structure Number 887ANN
- # 7–887ANS Location: Structure Number 887ANS
- # 8–STRING Location: Stringing Site
- # 9–866S Location: Structure Number 866S
- # 10–870S Location: Between Structure Numbers 869S & 870S
- # 11–873S Location: Structure Number 873S
- # 12–878S Location: Structure Number 878S
- # 13–879S Location: Structure Number 879S
- # 14–879S Location: On-ramp north of Bridgeport Avenue
- # 15–880S Location: East of Structure Number 880S
- # 16–885S Location: Structure Number 885S

8 Contractors

8.1 General

All contractors and subcontractors who will perform actions on site that may reasonably be expected to cause or have the potential to cause pollution of the waters of the State will be identified in *Appendix B*.

8.2 Certification Statement

All contractors and subcontractors must sign the certification included in *Appendix B*. All certifications will be included in the Stormwater Pollution Control Plan.

9 Additional Requirements

9.1 Endangered and Threatened Species

Preliminary review of the maps titled Natural Diversity Data Base (NDDB) Areas in Milford, CT dated December 2013 published by the Connecticut Department of Energy and Environmental Protection, verified that the project sites are not located within, but are in close proximity to areas known to contain State and Federal Listed Species and Significant Natural Communities. Therefore, a NDDB review was requested.

The CTDEEP issued a response letter dated January 15, 2014 referencing NDDDB Determination No. 201400345. This letter and NDDDB mapping can be found in *Attachment C* of the General Permit Registration Form, under *Appendix A* of this plan.

10 Termination

Once the site has been stabilized and all final inspections have occurred, the registrant shall file a termination notice. Prior to filing for termination, all temporary erosion and sediment control measures shall be removed. A blank copy of the Notice of Termination Form is provided in *Appendix F*.

Figures





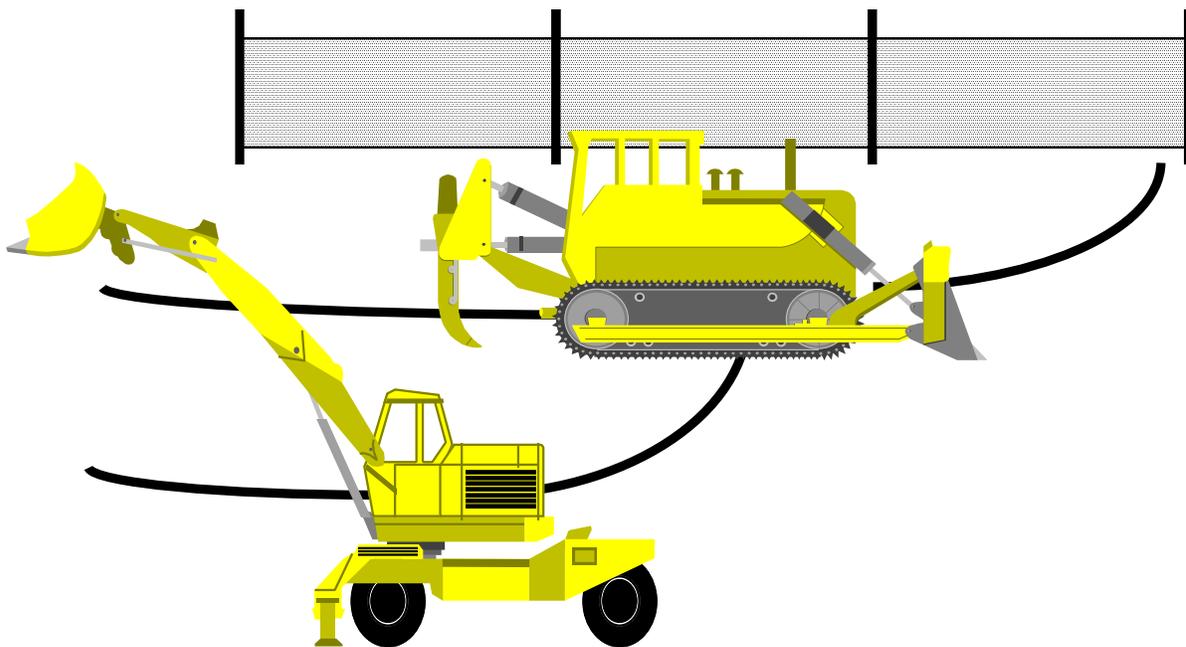
FIG. 1

Appendix A

CTDEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities



General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities



Issuance Date: August 21, 2013
Effective Date: October 1, 2013

Printed on recycled paper

General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

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General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Section 1. Authority

This general permit is issued under the authority of section 22a-430b of the Connecticut General Statutes.

Section 2. Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the Connecticut General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following definitions shall apply:

“*x-year, 24-hour rainfall event*” means the maximum 24-hour precipitation event with a probable recurrence interval of once in the given number of years (i.e. $x=2, 25$ or 100), as defined by the National Weather Service in Technical Paper Number 40, “Rainfall Frequency Atlas of the United States,” May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

“*Annual sediment load*” means the total amount of sediment carried by stormwater runoff on an annualized basis.

“*Aquifer protection area*” means aquifer protection area as defined in section 22a-354h of the Connecticut General Statutes.

“*Best engineering practices*” means the design of engineered control measures to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable.

“*CFR*” means the Code of Federal Regulations.

“*Coastal area*” means coastal area as defined in section 22a-93(3) of the Connecticut General Statutes.

“*Coastal waters*” means coastal waters as defined in section 22a-93(5) of the Connecticut General Statutes.

“*Commissioner*” means commissioner as defined in section 22a-2(b) of the Connecticut General Statutes.

“*Construction activity*” means any activity associated with construction at a site including, but not limited to, clearing and grubbing, grading, excavation, and dewatering.

“*Department*” means the Department of Energy & Environmental Protection.

“*Developer*” means a person who or municipality which is responsible, either solely or partially through contract, for the design and construction of a project site.

“*Dewatering wastewater*” means wastewater associated with the construction activity generated from the lowering of the groundwater table, the pumping of accumulated stormwater or uncontaminated groundwater from an excavation, the pumping of surface water from a cofferdam, or pumping of other surface water that has been diverted into a construction site.

“*District*” means a soil and water conservation district established pursuant to section 22a-315 of the Connecticut General Statutes. Appendix E lists the Districts, their geographic delineations, and contact information.

“*Disturbance*” means the execution of any of the construction activity(ies) defined in this general permit.

“*Effective Impervious Cover*” is the total area of a site with a Rational Method runoff coefficient of 0.7 or greater (or other equivalent methodology) from which stormwater discharges directly to a surface water or to a storm sewer system.

“*Engineered stormwater management system*” means any control measure and related appurtenances which requires engineering analysis and/or design by a professional engineer.

“*Erosion*” means the detachment and movement of soil or rock fragments by water, wind, ice and gravity.

“*Fresh-tidal wetland*” means a tidal wetland with an average salinity level of less than 0.5 parts per thousand.

“*Grab sample*” means an individual sample collected in less than fifteen minutes.

“*Groundwater*” means those waters of the state that naturally exist or flow below the surface of the ground.

“*Guidelines*” means the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, established pursuant to section 22a-328 of the Connecticut General Statutes.

“*High Quality Waters*” means those waters defined as high quality waters in the Connecticut Water Quality Standards published by the Department, as may be amended.

“*Impaired water(s)*” means those surface waters of the state designated by the commissioner as impaired pursuant to Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report.

“*In Responsible charge*” means professional experience for which the Commissioner determines that a professional’s primary duties consistently involve a high level of responsibility and decision making in the planning and designing of engineered stormwater management systems or in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects. The Commissioner shall consider the following in determining whether a professional’s experience qualifies as responsible charge experience:

- (i) the level of independent decision-making exercised;
- (ii) the number of individuals and the disciplines of the other professionals that the professional supervised or coordinated;
- (iii) the extent to which a professional’s responsibilities consistently involved the review of work performed by other professionals involved the planning and designing of engineered stormwater management systems or the planning and designing of soil erosion and sediment controls for residential and commercial construction projects;
- (iv) the extent to which a professional’s responsibilities consistently involved the planning and designing of engineered stormwater management systems or the planning and designing of soil erosion and sediment controls for residential and commercial construction projects and whether such responsibilities were an integral and substantial component of the professional’s position;
- (v) the nature of a professional’s employer’s primary business interests and the relation of those interests to planning and designing of engineered stormwater management systems or to planning and designing of soil erosion and sediment controls for residential and commercial construction projects;

- (vi) the extent to which a professional has engaged in the evaluation and selection of scientific or technical methodologies for planning and designing of engineered stormwater management systems or for planning and designing of soil erosion and sediment controls for residential and commercial construction projects;
- (vii) the extent to which a professional drew technical conclusions, made recommendations, and issued opinions based on the results of planning and designing of engineered stormwater management systems or of planning and designing of soil erosion and sediment controls for residential and commercial construction projects; or
- (viii) any other factor that the Commissioner deems relevant.

“*Individual permit*” means a permit issued to a specific permittee under section 22a-430 of the Connecticut General Statutes.

“*Inland wetland*” means wetlands as defined in section 22a-38 of the Connecticut General Statutes.

“*Landscape Architect*” means a person with a currently effective license issued in accordance with chapter 396 of the Connecticut General Statutes.

“*Linear Project*” includes the construction of roads, railways, bridges, bikeways, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

“*Locally approvable project*” means a construction activity for which the registration is not for a municipal, state or federal project and is required to obtain municipal approval for the project.

“*Locally exempt project*” means a construction activity for which the registration is for a project authorized under municipal, state or federal authority and may not be required to obtain municipal approval for the project.

“*Low Impact Development*” or “*LID*” means a site design strategy that maintains, mimics or replicates pre-development hydrology through the use of numerous site design principles and small-scale treatment practices distributed throughout a site to manage runoff volume and water quality at the source.

“*Minimize*”, for purposes of implementing the control measures in Section 5(b)(2) of this general permit, means to reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

“*Municipal separate storm sewer system*” or “*MS4*” means conveyances for stormwater (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) owned or operated by any municipality and discharging to surface waters of the state.

“*Municipality*” means a city, town or borough of the state as defined in section 22a-423 of the Connecticut General Statutes.

“*Nephelometric Turbidity Unit*” or “*NTU*” means a unit measure of turbidity from a calibrated nephelometer.

“*Normal Working Hours*”, for the purposes of monitoring under Section 5(c) of this general permit, are considered to be, at a minimum, Monday through Friday, between the hours of 8:00 am and 6:00 pm, unless additional working hours are specified by the permittee.

“*Permittee*” means any person who or municipality which initiates, creates or maintains a discharge in accordance with Section 3 of this general permit.

“*Person*” means person as defined in section 22a-423 of the Connecticut General Statutes.

“*Phase*” means a portion of a project possessing a distinct and complete set of activities that have a specific functional goal wherein the work to be completed in the phase is not dependent upon the execution of work in a later phase in order to make it functional.

“*Point Source*” means any discernible, confined and discrete stormwater conveyance (including but not limited to, any pipe, ditch, channel, tunnel, conduit, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft) from which pollutants are or may be discharged.

“*Professional Engineer*” or “*P.E.*” means a person with a currently effective license issued in accordance with chapter 391 of the Connecticut General Statutes.

“*Qualified Inspector*” means an individual possessing either (1) a professional license or certification by a professional organization recognized by the commissioner related to agronomy, civil engineering, landscape architecture, soil science, and two years of demonstrable and focused experience in erosion and sediment control plan reading, installation, inspection and/or report writing for residential and commercial construction projects in accordance with the Guidelines; or (2) five years of demonstrable and focused experience in erosion and sediment control plan reading, installation, inspection and/or report writing for residential and commercial construction projects in accordance with the Guidelines; or (3) certification by the Connecticut Department of Transportation (DOT).

“*Qualified professional engineer*” means a professional engineer who has, for a minimum of eight years, engaged in the planning and designing of engineered stormwater management systems for residential and commercial construction projects in accordance with the Guidelines and the Stormwater Quality Manual including, but not limited to, a minimum of four years in responsible charge of the planning and designing of engineered stormwater management systems for such projects.

“*Qualified soil erosion and sediment control professional*” means a landscape architect or a professional engineer who: (1) has for a minimum of eight years engaged in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects in accordance with the Guidelines including, but not limited to, a minimum of four years in responsible charge of the planning and designing of soil erosion and sediment controls for such projects; or (2) is currently certified as a professional in erosion and sediment control as designated by EnviroCert International, Incorporated (or other certifying organization acceptable to the commissioner) and has for a minimum of six years experience engaged in the planning and designing of soil erosion and sediment controls for residential and commercial construction projects in accordance with the Guidelines including, but not limited to, a minimum of four years in responsible charge in the planning and designing of soil erosion and sediment controls for such projects.

“*Registrant*” means a person or municipality that files a registration.

“*Registration*” means a registration form filed with the commissioner pursuant to Section 4 of this general permit.

“*Regulated Municipal Separate Storm Sewer System*” or “*Regulated MS4*” means the separate storm sewer system of the City of Stamford or any municipally-owned or -operated separate storm sewer system (as defined above) authorized by the most recently issued General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 general permit) including all those located partially

or entirely within an Urbanized Area and those additional municipally-owned or municipally-operated Small MS4s located outside an Urbanized Area as may be designated by the commissioner.

“*Retain*” means to hold runoff on-site to promote vegetative uptake and groundwater recharge through the use of runoff reduction or LID practices or other measures. In addition, it means there shall be no subsequent point source release to surface waters from a storm event defined in this general permit or as approved by the commissioner.

“*Runoff reduction practices*” means those post-construction stormwater management practices used to reduce post-development runoff volume delivered to the receiving water, as defined by retaining the volume of runoff from a storm up to the first half inch or one inch of rainfall in accordance with Sections 5(b)(2)(C)(i)(a) or (b), respectively. Runoff reduction is quantified as the total annual post-development runoff volume reduced through canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration or evapo-transpiration.

“*Sediment*” means solid material, either mineral or organic, that is in suspension, is transported, or has been moved from its site of origin by erosion.

“*Site*” means geographically contiguous land on which a construction activity takes place or on which a construction activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person shall be deemed the same site if such land is part of a linear project (as defined in this section) or is otherwise connected by a right-of-way, which such person controls.

“*Soil*” means any unconsolidated mineral and organic material of any origin.

“*Stabilize*” means the use of measures as outlined in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, or as approved by the commissioner, to prevent the visible movement of soil particles and development of rills.

“*Structural measure*” means a measure constructed for the temporary storage and/or treatment of stormwater runoff.

“*Standard Industrial Classification Code*” or “*SIC Code*” means those codes provided in the Standard Industrial Classification Manual, Executive Office of the President, Office of Management and Budget 1987.

“*Standard of care*”, as used in Section 3(b), means to endeavor to perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

“*Stormwater*” means waters consisting of rainfall runoff, including snow or ice melt during a rain event.

“*Stormwater Quality Manual*” means the 2004 Connecticut Stormwater Quality Manual published by the Connecticut Department of Energy & Environmental Protection, as amended.

“*Surface water*” means that portion of waters, as the term “waters” is defined in section 22a-423 of the Connecticut General Statutes, located above the ground surface.

“*Tidal wetland*” means a wetland as that term is defined in section 22a-29(2) of the Connecticut General Statutes.

“*Total disturbance*” means the total area on a site where soil will be exposed or susceptible to erosion during the course of all phases of a project.

“*Total Maximum Daily Load*” or “*TMDL*” means the maximum capacity of a surface water to assimilate a pollutant as established by the commissioner, including pollutants contributed by point and non-point sources and a margin of safety.

“*Upland soils*” means soils which are not designated as poorly drained, very poorly drained, alluvial, or flood plain by the National Cooperative Soils Survey, as may be amended, of the Natural Resources Conservation Service of the United States Department of Agriculture and/or the inland wetlands agency of the municipality in which the project will take place.

“*Water company*” means water company as defined in section 25-32a of the Connecticut General Statutes.

“*Water Quality Standards or Classifications*” means those water quality standards or classifications contained in the Connecticut Water Quality Standards published by the Department, as may be amended.

“*Water Quality Volume*” or “*WQV*” means the volume of runoff generated by one inch of rainfall on a site as defined in the 2004 Connecticut Stormwater Quality Manual, as amended.

Section 3. Authorization Under This General Permit

(a) *Eligible Activities*

This general permit authorizes the discharge of stormwater and dewatering wastewaters to surface waters from construction activities on a site, as defined in this general permit, with a total disturbance of one or more acres of land area on a site, *regardless of project phasing*.

In the case of a larger plan of development (such as a subdivision), the estimate of total acres of site disturbance shall include, but is not limited to, road and utility construction, individual lot construction (e.g. house, driveway, septic system, etc.), and all other construction associated with the overall plan, regardless of the individual parties responsible for construction of these various elements.

(b) *Requirements for Authorization*

This general permit authorizes the construction activity listed in the “Eligible Activities” section (Section 3(a)) of this general permit provided:

(1) Coastal Management Act

Such construction activity must be consistent with all applicable goals and policies in section 22a-92 of the Connecticut General Statutes, and must not cause adverse impacts to coastal resources as defined in section 22a-93(15) of the Connecticut General Statutes. Please refer to the Appendix D for additional guidance.

(2) Endangered and Threatened Species

Such activity must not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and must not result in the destruction or adverse modification of habitat designated as essential to such species. See Appendix A.

(3) Aquifer Protection Areas

Such construction activity, if it is located within an aquifer protection area as mapped under section 22a-354b of the General Statutes, must comply with regulations adopted pursuant to section 22a-354i of the General Statutes. Please refer to the Appendix C for additional guidance.

For any construction activity regulated pursuant to sections 8(c) and 9(b) of the Aquifer Protection Regulations (section 22a-354i(1)-(10) of the Regulations of Connecticut State Agencies), the Stormwater Pollution Control Plan (Plan) must assure that stormwater run-off generated from the regulated construction activity (i) is managed in a manner so as to prevent pollution of groundwater, and (ii) complies with all the requirements of this general permit.

(4) Mining Operations Exception

The stormwater discharge resulting from an activity classified as Standard Industrial Classification 10 through 14 (the mining industry) is not authorized by this general permit and is regulated under the most recently issued General Permit for the Discharge of Stormwater Associated with Industrial Activity.

(5) Discharge to POTW

The stormwater is *not* discharged to a Publicly Owned Treatment Works (POTW).

(6) Discharge to Groundwater

The stormwater is *not* discharged entirely to groundwater, meaning a stormwater discharge to a surface water will not occur up to a 100-year, 24-hour rainfall event.

(7) Such construction activity must be consistent with the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) for those river components and tributaries which have been designated as Wild and Scenic by the United States Congress. Further, such construction activities must not have a direct and adverse effect on the values for which such river designation was established. Please refer to Appendix H for additional guidance.

(8) Certification Requirements for Registrants and other Individuals

As part of the registration for this general permit, the registrant and any other individual or individuals responsible for preparing the registration submits to the commissioner a written certification which, at a minimum, complies with the following requirements:

- (A) The registrant and any other individual or individuals responsible for preparing the registration and signing the certification has completely and thoroughly reviewed, at a minimum, this general permit and the following regarding the activities to be authorized under such general permit:
 - (i) all registration information provided in accordance with Section 4(c)(2) of such general permit;
 - (ii) the project site, based on a site inspection;
 - (iii) the Stormwater Pollution Control Plan; and
 - (iv) any plans and specifications and any Department approvals regarding such Stormwater Pollution Control Plan;

- (B) The registrant and any other individual or individuals responsible for preparing the registration and signing the certification pursuant to this general permit has, based on the review described in section 3(b)(8)(A) of this general permit, made an affirmative determination to:
- (i) comply with the terms and conditions of this general permit;
 - (ii) maintain compliance with all plans and documents prepared pursuant to this general permit including, but not limited to, the Stormwater Pollution Control Plan;
 - (iii) properly implement and maintain the elements of the Stormwater Pollution Control Plan; and
 - (iv) properly operate and maintain all stormwater management systems in compliance with the terms and conditions of this general permit to protect the waters of the state from pollution;
- (C) Such registrant and any other individual or individuals responsible for preparing the registration certifies to the following statement: "I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b)(8)(B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."
- (9) The registrant has submitted to the commissioner a written certification by a professional engineer or, where appropriate, a landscape architect licensed in the State of Connecticut for the preparation, planning and design of the Stormwater Pollution Control Plan and stormwater management systems:
- (A) The professional engineer or landscape architect shall certify to the following statement:
- "I hereby certify that I am a [professional engineer][landscape architect] licensed in the State of Connecticut. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I certify that I have thoroughly and completely reviewed the Stormwater

Pollution Control Plan for the project or activity covered by this certification. I further certify, based on such review and on the standard of care for such projects, that the Stormwater Pollution Control Plan has been prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, the Stormwater Quality Manual, as amended, and the conditions of the general permit, and that the controls required for such Plan are appropriate for the site. I further certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement in this certification may subject me to sanction by the Department and/or be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

- (B) Nothing in this section shall be construed to authorize a professional engineer or a landscape architect to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(10) Plan Review and Certification by a District for Locally Approvable Projects

For those Plans not reviewed in accordance with Section 3(b)(11), below, the registrant has submitted to the commissioner a written certification by the appropriate regional District for the review of the Stormwater Pollution Control Plan pursuant to Appendix F, which, at a minimum, complies with the following requirements:

- (A) the Plan Review Certification must be signed by the District. Information on the District review process is outlined in the Memorandum of Agreement provided in Appendix F. In cases where the District is unable to complete review of the Plan within the time limits specified in the Memorandum of Agreement in Appendix F, a notice to that effect signed by the District may be submitted in lieu of the certification.
- (B) the Stormwater Pollution Control Plan has been prepared in accordance with the requirements of Section 5(b) of the general permit.
- (C) Nothing in this subsection shall be construed to authorize District personnel to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(11) Plan Review and Certification by a Qualified Soil Erosion and Sediment Control Professional and Qualified Professional Engineer for Locally Approvable Projects

For those Plans not reviewed in accordance with Section 3(b)(10), above, the registrant has submitted to the commissioner a written certification by a qualified professional engineer or a qualified soil erosion and sediment control professional in accordance with the following requirements:

- (A) for projects disturbing more than one acre and less than fifteen (15) acres, such qualified soil erosion and sediment control professional or qualified professional engineer:
 - (i) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant; and
 - (ii) has no ownership interest of any kind in the project for which the registration is being submitted.

- (B) for projects disturbing fifteen (15) acres or more, such qualified soil erosion and sediment control professional or qualified professional engineer:
 - (i) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant;
 - (ii) did not engage in any activities associated with the preparation, planning, designing or engineering of such plan for soil erosion and sediment control or plan for stormwater management systems on behalf of such registrant;
 - (iii) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, designing or engineering of such plans and specifications for soil erosion and sediment control or plans and specifications for stormwater management systems on behalf of such registrant; and
 - (iv) has no ownership interest of any kind in the project for which the registration is being submitted.
- (C) The qualified professional engineer or qualified soil erosion and sediment control professional signing the certification has, at a minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under such general permit:
 - (i) all registration information provided in accordance with Section 4(c)(2) of such general permit;
 - (ii) the site, based on a site inspection;
 - (iii) the Stormwater Pollution Control Plan;
 - (iv) the Guidelines;
 - (v) the Stormwater Quality Manual, if applicable; and
 - (vi) all non-engineered and engineered stormwater management systems, including any plans and specifications and any Department approvals regarding such stormwater management systems.
- (D) Affirmative Determination
 - (i) The qualified soil erosion and sediment control professional signing the certification must have made an affirmative determination, based on the review described in section 3(b)(11)(C) of this general permit that:
 - (a) the Stormwater Pollution Control Plan prepared and certified pursuant to the registration is adequate to assure that the project or activity authorized under this general permit, if implemented in accordance with the Stormwater Pollution Control Plan, will comply with the terms and conditions of such general permit; and
 - (b) all non-engineered stormwater management systems:
 - (1) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically

practicable and that conform to those in the Guidelines and the Stormwater Quality Manual;

- (2) will function properly as designed;
- (3) are adequate to ensure compliance with the terms and conditions of this general permit; and
- (4) will protect the waters of the state from pollution.

(ii) The qualified professional engineer signing the certification must have made an affirmative determination, based on the review described in section 3(b)(11)(C) of this general permit that:

- (a) the Stormwater Pollution Control Plan prepared and certified pursuant to the registration is adequate to assure that the activity authorized under this general permit, if implemented in accordance with the Stormwater Pollution Control Plan, will comply with the terms and conditions of such general permit; and
- (b) all non-engineered and engineered stormwater management systems:
 - (1) have been designed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable and that conform to those in the Guidelines and the Stormwater Quality Manual;
 - (2) will function properly as designed;
 - (3) are adequate to ensure compliance with the terms and conditions of this general permit; and
 - (4) will protect the waters of the state from pollution.

(E) The qualified professional engineer or qualified soil erosion and sediment control professional shall, provided it is true and accurate, certify to the following statement:

"I hereby certify that I am a qualified professional engineer or qualified soil erosion and sediment control professional, or both, as defined in the General Permit for Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and as further specified in sections 3(b)(11)(A) and (B) of such general permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(11)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination in accordance with Sections 3(b)(11)(D)(i) and (ii) of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be

punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

- (F) Nothing in this subsection shall be construed to authorize a qualified soil erosion and sediment control professional or a qualified professional engineer to engage in any profession or occupation requiring a license under any other provision of the general statutes without such license.

(12) New Discharges to Impaired Waters

New stormwater discharges directly to an impaired water, as indicated in the State's Integrated Water Quality Report, must be in accordance with the following conditions:

- (A) Stormwater discharges that go directly to impaired waters seeking authorization under this general permit shall comply with the requirements of this subsection (B) below if the indicated cause or potential cause of the impairment is one of the following:
- Site Clearance (Land Development or Redevelopment)
 - Post-Development Erosion and Sedimentation
 - Source Unknown (if cause of impairment is Sedimentation/Siltation)
- (B) Such stormwater discharge is authorized if the permittee complies with the requirements of Section 5(b)(3) of this permit and receives a written affirmative determination from the commissioner that the discharge meets the requirements of that section. In such case, the permittee must keep a copy of the written determination onsite with the Plan. If the permittee does not receive such affirmative determination, the construction activity is not authorized by this general permit and must obtain an individual permit.

(c) Registration

Pursuant to the "Registration Requirements" section (Section 4) of this general permit, a completed registration with respect to the construction activity shall be filed with the commissioner as follows:

(1) Locally Approvable Projects

The registration must:

- (A) Be electronically submitted, along with all required elements in subsections (B), (C) and (D), below, at least sixty (60) days prior to the planned commencement of the construction activity.
- (B) Include the Registration Form (available at www.ct.gov/deep/stormwater).
- (C) Include any additional forms and information regarding compliance and/or consistency with the Coastal Management Act, Impaired Waters (including TMDL requirements), Endangered and Threatened Species, and Aquifer Protection Areas that may be required pursuant to the "Requirements of Authorization" section (Section 3(b)).
- (D) Include a Plan Review Certification in accordance with the "Plan Review Certification" (Section 5(b)(8)).

Locally Approvable projects may also choose to make their Plan electronically available in accordance with Section 4(c)(2)(N) of this general permit. The 60 day period cited in subsection

(A), above, will not begin until all required elements have been submitted. Failure to include any of these required submissions shall be grounds to reject the registration.

(2) Locally Exempt Projects

The registration must:

- (A) Be electronically submitted, along with all required elements in subsections (B), (C) and (D), below, at least:
 - (i) sixty (60) days prior to the planned commencement of the construction activity if the site has a total disturbed area of between one (1) and twenty (20) acres; *or*
 - (ii) ninety (90) days prior to the planned commencement of construction activity if the site:
 - (a) has a total disturbed area greater than twenty (20) acres;
 - (b) discharges to a tidal wetland (that is not a fresh-tidal wetland) within 500 feet of the discharge point; *or*
 - (c) is subject to the impaired waters provisions of Section 3(b)(12).
- (B) Include the Registration Form (available at www.ct.gov/deep/stormwater).
- (C) Include any additional forms and information regarding compliance and/or consistency with the Coastal Management Act, Impaired Waters (including TMDL requirements), Endangered and Threatened Species, and Aquifer Protection that may be required pursuant to the “Requirements of Authorization” section (Section 3(b)).
- (D) Include an electronic copy of the Stormwater Pollution Control Plan (Plan) (or a web address where the electronic Plan can be downloaded) for the commissioner’s review. The electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in this electronic copy any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

The 60 or 90 day periods cited in subsections (A), above, will not begin until all required elements have been submitted. Failure to include any of these required submissions shall be grounds to reject the registration.

(3) Re-Registration of Existing Projects

For sites previously registered under any previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and for which no Notice of Termination has been submitted pursuant to the “Termination Requirements” section (Section 6), a Re-Registration Form (available at www.ct.gov/deep/stormwater) pursuant to Section 4(c)(3) shall be submitted on or before February 1, 2014. The re-registration fee is payable (or waived) in accordance with Section 4(c)(1)(A)(iii). Resubmission of the permittee’s Plan is not required unless specifically requested by the commissioner.

(d) *Small Construction*

For construction projects with a total disturbance of between one and five acres, the permittee shall adhere to the erosion and sediment control land use regulations of the municipality in which the construction activity is conducted, as well as the Guidelines and the Stormwater Quality Manual.

No registration or Plan review and certification shall be required for such construction activity provided a land-use commission of the municipality (i.e. planning/zoning, wetland, conservation, etc) reviews and issues a written approval of the proposed erosion and sediment control measures, pursuant to the requirements of section 22a-329 of the Connecticut General Statutes. In the absence of such municipal commission approval, the permittee shall register with the DEEP under the requirements for a Locally Exempt Project and comply with all applicable conditions of this general permit.

(e) *Geographic Area*

This general permit applies throughout the State of Connecticut.

(f) *Effective Date and Expiration Date of this General Permit*

The registration provisions of Section 3(c) and 4 of this General Permit, including any applicable definitions or provisions referred to in those sections insofar as they facilitate submission of a registration, shall be effective September 1, 2013. All remaining provisions of this General Permit shall be effective on October 1, 2013. The provisions of this General Permit shall expire on September 30, 2018.

(g) *Effective Date of Authorization*

A construction activity is authorized by this general permit at such time as specified in subsections (1) and (2), below.

(1) Authorization Timelines

The activity is authorized based on the following timelines unless superseded by subsection (2), below:

- (A) for locally approvable projects, sixty (60) days after the submission of the registration form required by Section 4(c), or
- (B) for locally exempt projects under 20 acres, sixty (60) days after the submission of the registration form required by Section 4(c), or
- (C) for locally exempt projects over 20 acres, ninety (90) days after the submission of the registration form required by Section 4(c).

(2) Alternate Authorization Timelines

If one of the following conditions for authorization applies, that condition shall supersede those of subsection (1), above:

- (A) for sites for which the registration and Plan availability and review provisions of Section 4(e) are completed prior to the authorization periods in subsection (1), above, the commissioner may authorize the activity upon such completion, or

- (B) for sites subject to the conditions of Section 3(b)(2), 3(b)(12) and/or Section 5(a)(2), the activity is authorized on the date of the commissioner’s affirmative determination and/or approval, or
- (C) for sites authorized by any previous version of this general permit and for which no Notice of Termination has been submitted pursuant to the “Termination Requirements” section (Section 6), the activity is authorized effective October 1, 2013. Authorization under this general permit shall cease if a re-registration form is not submitted on or before February 1, 2014.

(h) *Revocation of an Individual Permit*

If a construction activity is eligible for authorization under this general permit and such activity is presently authorized by an individual permit, the existing individual permit may be revoked by the commissioner upon a written request by the permittee. If the commissioner revokes such individual permit in writing, such revocation shall take effect on the effective date of authorization of such activity under this general permit.

(i) *Issuance of an Individual Permit*

If the commissioner issues an individual permit under section 22a-430 of the Connecticut General Statutes, authorizing a construction activity authorized by this general permit, this general permit shall cease to authorize that activity beginning on the date such individual permit is issued.

Section 4. Registration Requirements

(a) *Who Must File a Registration*

With the exception noted in the “Small Construction” section (Section 3(d)) of this general permit, any person or municipality which initiates, creates, originates or maintains a discharge described in the “Eligible Activities” section (Section 3(a)) of this general permit shall file with the commissioner a registration form that meets the requirements of the “Contents of Registration” section (Section 4(c)) of this general permit (or a re-registration form) and the applicable fee within the timeframes and in the amounts specified in Sections 3(c) and 4(c)(1)(A), respectively. Any such person or municipality filing a registration remains responsible for maintaining compliance with this general permit.

(b) *Scope of Registration*

Each registration shall be limited to the discharge at or from one site; no registration shall cover discharges at or from more than one site.

(c) *Contents of Registration*

(1) Fees

(A) Registration Fee

A registration, if required, shall not be deemed complete unless the registration fee has been paid in full.

(i) Locally Approvable Projects

A registration fee of \$625.00 shall be submitted to the Department with the registration form.

(ii) Locally Exempt Projects

A registration fee shall be submitted with a registration form as follows:

- (a) For sites with total disturbance of between one (1) and twenty (20) acres, the fee shall be \$3,000.
- (b) For sites with total disturbance equal to or greater than twenty (20) acres and less than fifty (50) acres, the fee shall be \$4,000.
- (c) For sites with total disturbance equal to or greater than fifty (50) acres, the fee shall be \$5,000.

The fees for municipalities shall be half of those indicated in subsections (a), (b) and (c) above pursuant to section 22a-6(b) of the Connecticut General Statutes. State and Federal agencies shall pay the full fees specified in this subsection.

(iii) Re-registration

- (a) For sites that registered under the previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities prior to September 1, 2012 and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the re-registration fee shall be \$625 payable with submission of the re-registration form within one hundred twenty (120) days from the effective date of this general permit. If a Notice of Termination is submitted prior to that time, no registration or fee are required.
- (b) For sites that registered under the previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities on or after September 1, 2012 and for which no Notice of Termination has been submitted pursuant to the "Termination Requirements" section (Section 6), the re-registration fee is waived.

(B) The registration fee shall be paid electronically or by check or money order payable to the Department of Energy & Environmental Protection.

(C) The registration fee is non-refundable.

(2) Registration Form

A registration shall be filed electronically on forms prescribed and provided by the commissioner (available at: www.ct.gov/deep/stormwater) and shall include, but not be limited to, the following:

- (A) Legal name, address, and telephone number of the registrant. If the registrant is a person (as defined in Section 2 of this permit) transacting business in Connecticut and is registered with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.
- (B) Legal name, address and telephone number of the owner of the property on which the construction activity will take place.

- (C) Legal name, address and telephone number of the primary contact for departmental correspondence and inquiries, if different from the registrant.
- (D) Legal name, address and telephone number of the developer of the property on which the construction activity is to take place.
- (E) Legal name, address and daytime and off-hours telephone numbers of the general contractor(s) or other representative(s), if different from the developer.
- (F) Legal name, address and telephone number of any consultant(s), engineer(s) or landscape architect(s) retained by the permittee to prepare the registration and Stormwater Pollution Control Plan.
- (G) Location address or description of the site for which the registration is filed.
- (H) The estimated duration of the construction activity.
- (I) Indication of the normal working hours of the site.
- (J) A brief description of the construction activity, including, but not limited to:
 - (i) Total number of acres to be disturbed, regardless of phasing.
 - (ii) Assurance that construction is in accordance with the Guidelines and local erosion and sediment control ordinances, where applicable.
 - (iii) For sites in the Coastal Boundary, documentation that the DEEP Office of Long Island Sound Programs or local governing authority has issued a coastal site plan approval or a determination that the project is exempt from coastal site plan review (see Appendix D) in accordance with section 22a-92 and 22a-93(15) of the Connecticut General Statutes.
 - (iv) Documentation that the construction activity will not threaten the continued existence of any species listed pursuant to section 26-306 of the Connecticut General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species (see Appendix A).
 - (v) For sites discharging to certain impaired waters, as specified in Section 3(b)(12), documentation that the construction activity meets the requirements of that section and Section 5(b)(3) for authorization under this general permit.
 - (vi) Assurance that the construction activity is not located within an aquifer protection area (see Appendix C) as mapped under section 22a-354b of the Connecticut General Statutes or, if it is located within an aquifer protection area, that the construction activity will comply with regulations adopted pursuant to section 22a-354i of the Connecticut General Statutes.
 - (vii) For a proposed locally approvable project, a plan review certification from the appropriate District, qualified soil erosion and sediment control professional, and/or qualified professional engineer in accordance with Section 5(b)(10) or (11) or a notice from the District that they were unable to complete the Plan review within the time limits specified in the Memorandum of Agreement in Appendix F.

- (K) A brief description of the stormwater discharge, including:
- (i) The name of the municipal separate storm sewer system or immediate surface water body or wetland to which the stormwater runoff will discharge;
 - (ii) Verification of whether or not the site discharges to a tidal wetland (that is not a fresh-tidal wetland) within 500 feet of the discharge point, to a high quality water or to an impaired water with or without a TMDL;
 - (iii) The name of the watershed or nearest waterbody to which the site discharges.
 - (iv) Location of the stormwater discharge(s) including latitude and longitude.
- (L) The total effective impervious cover for the site before and after the proposed construction activity.
- (M) Documentation that the proposed construction activity has been reviewed for consistency with state Historic Preservation statutes, regulations, and policies including identification of any potential impacts on property listed or eligible for listing on the Connecticut Register of Historic Places. A review conducted for an Army Corps of Engineers Section 404 wetland permit would meet this qualification. Refer to Appendix G for guidance on conducting the required review.
- (N) Registrants for locally approvable projects may, if they choose, attach an electronic copy of their Plan to their registration or provide a web address where their Plan may be downloaded. If an electronic plan is not provided, the registrant is still subject to the requirements for submission of a Plan to the commissioner or a member of the public pursuant to the "Plan Availability" section (Section 4(e)(2)). An electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in the Plan any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).
- (O) Registrants for all locally exempt projects must submit an electronic copy of their Plan or a web address where the electronic Plan can be downloaded. The electronic Plan shall be in Adobe™ PDF format or similar publicly available format in common use. **DO NOT INCLUDE** in this Plan any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).
- (P) The certification of the registrant and of the individual or individuals responsible for actually preparing the registration, in accordance with Section 3(b)(8).
- (Q) For all registrations, a design certification must be signed by a professional engineer in accordance with Section 3(b)(9):.
- (R) For registrations for locally approvable projects a review certification must be signed by either: (i) a District in accordance with Section 3(b)(10), or (ii) a qualified soil erosion and sediment control professional and/or qualified professional engineer in accordance with either Section 3(b)(11).

If the registrant is not capable of submitting electronically, a paper form may be submitted in accordance with Section 4(d).

(3) Re-Registration Form

For sites previously registered under any previous version of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and for which no Notice of Termination has been submitted pursuant to the “Termination Requirements” section (Section 6), a re-registration shall be filed electronically pursuant to Sections 3(c)(3) and 3(g) on forms prescribed and provided by the commissioner (available at: www.ct.gov/deep/stormwater) and shall include, but not be limited to, the following:

- (A) Legal name, address, and telephone number of the registrant. If the registrant is a person (as defined in Section 2 of this permit) transacting business in Connecticut and is registered with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State.
- (B) The previously issued permit number (beginning with GSN).
- (C) Legal name, address and telephone number of the owner of the property on which the construction activity will take place.
- (D) Legal name, address and telephone number of the primary contact for departmental correspondence and inquiries, if different from the registrant.
- (E) Legal name, address and telephone number of the developer of the property on which the subject construction activity is to take place.
- (F) Legal name, address and daytime and off-hours telephone numbers of the general contractor(s) or other representative(s), if different from the developer.
- (G) Legal name, address and telephone number of any consultant(s) or engineer(s) retained by the permittee to prepare the registration and Stormwater Pollution Control Plan.
- (H) Location address or description of the site for which the re-registration is filed.
- (I) Indication of the normal working hours of the site.
- (J) The estimated duration of the construction activity.
- (K) The signature of the registrant and of the individual or individuals responsible for actually preparing the re-registration, each of who shall certify in writing as follows:

“I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that all terms and conditions of the general permit are being met for all discharges which have been initiated and such activity is eligible for authorization under such permit. I further certify that all designs and plans for such activity meet the current terms and conditions of the general permit in accordance with Section 5(b)(5)(C) of such general permit and that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section

3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.”

If the registrant is not capable of submitting electronically, a paper form may be submitted in accordance with Section 4(d).

(d) *Where to File a Registration*

A registration (available at: www.ct.gov/deep/stormwater) shall be filed electronically with the commissioner in accordance with Section 3(c)(2) or (3). If the registrant does not have the capability to submit electronically, a paper registration may be filed at the following address:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

(e) *Availability of Registration and Plan*

By the fifteenth (15th) day of each month, the commissioner shall post on the DEEP website a list of registrations submitted in the previous month.

(1) Registration Availability

On or before fifteen (15) days from the date of posting by the commissioner, members of the public may review and comment on a registration. Any electronically available Plans will be posted with the corresponding registration.

(2) Plan Availability

(A) Electronic Plan Availability

For an electronically available Plan, on or before fifteen (15) days from the date of posting by the commissioner, members of the public may review and comment on a registrant’s Plan.

(B) Non-Electronic Plan Availability

For any Plan that is not electronically available, on or before fifteen (15) days from the date of a registration posting by the commissioner, members of the public may submit a written request to the commissioner to obtain a copy of a registrant’s Plan. The commissioner shall inform the registrant of the request and the name of the requesting party. If the commissioner does not already have access to a copy of the requested Plan, the registrant shall submit a copy of their Plan to the commissioner within seven (7) days of their receipt of such request. On or before fifteen (15) days from the date the commissioner makes a Plan available to the requesting party, they may submit written comments on the Plan to the commissioner.

(f) Additional Information

The commissioner may require a permittee to submit additional information that the commissioner reasonably deems necessary to evaluate the consistency of the subject construction activity with the requirements for authorization under this general permit.

(g) Additional Notification

For discharges authorized by this general permit to a regulated municipal separate storm sewer system, a copy of the registration and all attachments thereto shall also be submitted to the owner and operator of that system.

For discharges authorized by this general permit to a DOT separate storm sewer system, a copy of the registration and all attachments thereto shall also be submitted to the DOT upon request.

For discharges within a public drinking water supply watershed or aquifer area, a copy of the registration and the Plan described in subsection 5(b) of this general permit shall be submitted to the water company.

For discharges to river components and tributaries which have been designated as Wild and Scenic under the Wild and Scenic Rivers Act, a copy of the registration and the Plan described in 5(b) of this general permit shall be submitted to the applicable Wild and Scenic Coordinating Committee. Please refer to Appendix H for additional guidance

In addition, a copy of this registration and the Plan shall be available upon request to the local inland wetlands agency established pursuant to section 22a-42 of the Connecticut General Statutes, or its duly authorized agent.

(h) Action by Commissioner

- (1) The commissioner may reject without prejudice a registration if it does not satisfy the requirements of the “Contents of Registration” section (subsection 4(c)) of this general permit. Any registration refiled after such a rejection shall be accompanied by the fee specified in the “Fees” subsection (subsection 4(c)(1)) of this general permit.
- (2) The commissioner may disapprove a registration if is inconsistent with the requirements for authorization under the “Requirements for Registration” section (Section 3(b)) of this general permit, or for any other reason provided by law.
- (3) Disapproval of a registration under this subsection shall constitute notice to the registrant that the subject construction activity must be authorized under an individual permit.
- (4) Rejection or disapproval of a registration shall be in writing.

(i) Transition to New General Permit

On or after August 1, 2013, up until and including August 31, 2013, a person filing a new registration for a site may file such registration: (a) under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013; or (b) this general permit. A person filing a new registration for a site shall not register under both the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013 and this general permit. After August 31, 2013, a person filing a new registration for a site shall only register under this general permit and shall be authorized pursuant to Section 3(g) of this general permit.

(Note: Any person who, on or after August 1, 2013, up until and including August 31, 2013, files a new registration for a site under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities that expires on September 30, 2013 shall, after October 1, 2013, re-register such site pursuant to Section 3(c)(3) and Section 4(c)(3) of this general permit.)

A person re-registering a site pursuant to Section 3(c)(3) and Section 4(c)(3) of this general permit may submit the required re-registration information anytime on or after August 1, 2013.

(j) *Latest Date to Submit a Registration Under this General Permit*

No person shall submit a registration under this general permit after June 30, 2018.

Section 5. Conditions of this General Permit

The permittee shall meet all requirements of this general permit at all times. In addition, a permittee shall be responsible for conducting authorized construction activities in accordance with the following conditions:

(a) *Conditions Applicable to Certain Discharges*

(1) Structures and Dredging in Coastal and Tidal Areas

Any person who or municipality that discharges stormwater into coastal tidal waters for which a permit is required under section 22a-361 of the Connecticut General Statutes (structures and dredging) or section 22a-32 of the Connecticut General Statutes (Tidal Wetlands Act), shall obtain such permit(s) from the commissioner. A tidal wetland permit is required for the placement of any sediment upon a tidal wetland, whether it is deposited directly or indirectly.

(2) Discharges to Tidal Wetlands

Any site which has a post-construction stormwater discharge to a tidal wetland (that is not a fresh-tidal wetland) where such discharge is within 500 feet of the tidal wetland, shall discharge such stormwater through a system designed to retain and infiltrate the volume of stormwater runoff generated by 1 inch of rainfall on the site. If there are site constraints that would prevent retention of this volume on-site (e.g., brownfields, capped landfills, bedrock, elevated groundwater, etc.), documentation must be submitted, for the commissioner's review and written approval, which explains the site limitations and offers an alternative retention volume. In such cases, the portion of 1 inch that cannot be retained must be provided with additional stormwater treatment so as to protect water quality. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual.

For sites unable to comply with this section, the commissioner, at the commissioner's sole discretion, may require the submission of an individual permit in lieu of authorization under this general permit.

(3) Toxicity to Aquatic and Marine Life

The discharge shall not cause pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.

(4) Water Quality Standards

The stormwater discharge shall not cause or contribute to an exceedance of the applicable Water Quality Standards in the receiving water.

(5) High Quality Waters

Any new or increased stormwater discharge to high quality waters shall be discharged in accordance with the Connecticut Anti-Degradation Implementation Policy in the Water Quality Standards.

(b) Stormwater Pollution Control Plan

All registrants shall develop and maintain on-site a Stormwater Pollution Control Plan (Plan) for the construction activity authorized by this general permit. Once the construction activity begins, the permittee shall perform all actions required by such Plan and shall maintain compliance with the Plan thereafter. The Plan shall be designed to minimize (as defined in Section 2): (1) pollution caused by soil erosion and sedimentation during and after construction; and (2) stormwater pollution caused by use of the site after construction is completed.

(1) Development and Contents of Plan

(A) The Plan shall consist of site plan drawings and a narrative. The Plan shall be prepared in accordance with sound engineering practices, and shall be consistent with the Guidelines and the 2004 Connecticut Stormwater Quality Manual (available at <http://www.ct.gov/deep/stormwater>). The Plan shall also be consistent with any remedial action plan, closure plan or other plan required by any other DEEP permit.

(B) The Plan shall include, at a minimum, the following items:

(i) Site Plan

Site drawings indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, the location of major structural and non-structural controls (as specified in subsection 5(b)(2), below), the location of areas where stabilization practices are expected to occur, areas which will be vegetated following construction, monitored outfalls, surface waters, impaired waters (identifying those with and without a TMDL), high quality waters, inland wetlands, tidal wetlands, fresh-tidal wetlands, and locations where stormwater will be discharged to a surface water (both during and post-construction);

(ii) Site Description

(a) A narrative description of the nature of the construction activity;

(b) An estimate of the total area of the site and the total area of the site that is expected to be disturbed by construction activities;

(c) An estimate of the average runoff coefficient of the site after construction activities are completed;

(d) The name of the immediate receiving water(s) and the ultimate receiving water(s) of the discharges authorized by this general permit; and

(e) Extent of wetland acreage on the site.

(iii) Construction Sequencing

The Plan shall clearly identify the expected sequence of major construction activities on the site and corresponding erosion and sediment controls and shall include an estimated timetable for all construction activities, which shall be revised as necessary to keep the Plan current. Wherever possible, the site shall be phased to avoid the disturbance of over five acres at one time (or a lesser area of disturbance as required in the “Impaired Waters” section (Section 5(b)(3)). The Plan shall clearly show the limits of disturbance for the entire construction activity and for each phase.

(iv) Control Measures

The Plan shall include a description, in narrative and on the site plan drawings, of appropriate control measures that will be performed at the site to minimize the discharge of pollutants to waters of the state. Control measures shall be implemented in accordance with Section 5(b)(2) below. In addition, the following information shall be provided:

- (a) Calculations supporting the design of sediment and floatables removal controls pursuant to Section 5(b)(2)(C)(ii)(b).
- (b) Calculations supporting the design of velocity dissipation controls pursuant to Section 5(b)(2)(C)(ii)(c).

(v) Runoff Reduction and Low Impact Development (LID) Information

Where runoff reduction practices and/or LID measures are utilized, the following information shall be included in the site plan and narrative:

- (a) The location of the site’s streams, floodplains, all wetlands, riparian buffers, slopes 3:1 and steeper, and vegetation identified for preservation and non-disturbance during construction such as forested areas, hay fields, and old fields;
- (b) Natural drainage patterns, swales, and other drainage ways, that are not streams, floodplains, or wetland areas;
- (c) The location of all areas with soils suitable for infiltration¹ and areas of the site best suited for infiltration for the siting of runoff reduction practices and LID design measures;
- (d) The location of all areas unsuitable or least suitable for infiltration for the siting of areas of development/building;
- (e) The location of all post-construction stormwater management measures, runoff reduction practices and LID design measures developed pursuant to subsection 5(b)(2)(C)(i) below;
- (f) Identification of areas inappropriate for the infiltration of stormwater runoff from land uses with a significant potential for groundwater pollution;

¹ Infiltration rates must be measured by a field permeability test. The measured field design infiltration rate is equal to one-half the field-measured infiltration rate.

- (g) A narrative describing the nature, purpose, implementation and long-term maintenance of the post-construction measures, runoff reduction practices and LID design measures;
- (h) Calculations, for measures developed pursuant to Section 5(b)(2)(C)(i), illustrating the retention of the water quality volume or half the water quality volume for the site, as applicable, including a discussion of the impact of any runoff reduction and/or LID practices on these calculations.
- (i) A narrative describing any site constraints that prevent retention of the appropriate volume specified in Section 5(b)(2)(C)(i) including: an explanation of the site limitations; a description of the runoff reduction practices implemented; an explanation of why the amount retained constitutes the maximum extent achievable; an alternative retention volume; and a description of the measures used to provide additional stormwater treatment for sediment, floatables and nutrients above the alternate volume up to the water quality volume.
- (j) Calculations showing the proposed effective impervious cover for the site and, where necessary or appropriate for measures developed for linear projects pursuant to Section 5(b)(2)(C)(i), each outfall drainage area.

(vi) Inspections

The Plan shall include a narrative of all inspection personnel conducting the routine inspections, their responsibilities and procedures pursuant to subsection 5(b)(4)(B) below. The Plan shall also include documentation of the qualifications of the inspector(s) and the findings, actions and results of all inspections conducted at the site.

(vii) Monitoring

The Plan shall provide a narrative of the stormwater monitoring procedures pursuant to Section 5(c). This narrative shall include documentation of the monitoring frequency, personnel conducting monitoring, identification of monitored outfalls, methodology for monitoring, provisions for monitoring a linear project (if applicable), the site's normal working hours, the method for measuring turbidity and a copy of all monitoring records.

(viii) Contractors

- (a) The Plan shall clearly identify each contractor and subcontractor that will perform construction activities on the site that have the potential to cause pollution of the waters of the State. The Plan shall include a copy of the certification statement in the "Contractor Certification Statement" section, below, signed by each such contractor and subcontractor.

(b) Contractor Certification Statement

The Plan shall include the following certification signed by each contractor and subcontractor identified in the Plan as described above:

"I certify under penalty of the law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor or

subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site.”

The certification shall include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

(c) Subdivisions

Where individual lots in a subdivision or other common plan of development are conveyed or otherwise the responsibility of another person or municipality, those individual lot contractors shall be required to comply with the provisions of this general permit and the Stormwater Pollution Control Plan, and shall sign the certification statement in the “Contractor Certification Statement” section, above, regardless of lot size or disturbed area. In such cases, the permittee shall provide a copy of the Plan to each individual lot contractor, obtain signed certifications from such contractors and retain all signed certifications in the Plan.

(ix) Impaired Waters

For construction activities that discharge to impaired waters, as specified in “New Discharges to Impaired Waters” (Section 3(b)(12)), the Plan shall include a description of the provisions for controlling the construction and post-construction stormwater discharges to these waters pursuant to subsection 5(b)(3) below.

(2) Stormwater Control Measures

Control Measures are required Best Management Practices (BMPs) that the permittee must implement to minimize the discharge of pollutants from the permitted activity. The term “minimize” means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

Control Measures shall be designed in accordance with the Guidelines, the Stormwater Quality Manual or the DOT Qualified Products List (http://www.ct.gov/dot/lib/dot/documents/dresearch/conndot_qpl.pdf). Use of controls to comply with the “Erosion and Sediment Controls” section (subsection (A) below) of this general permit that are not included in those resources must be approved by the commissioner or the commissioner’s designated agent. The narrative and drawings of controls shall address the following minimum components:

(A) Erosion and Sediment Controls

(i) Soil Stabilization and Protection

The Plan shall include a narrative and drawings of interim and permanent soil stabilization practices for managing disturbed areas and soil stockpiles, including a schedule for implementing the practices. The Permittee shall ensure that existing vegetation is preserved to the maximum extent practicable and that disturbed portions of the site are minimized and stabilized.

Where construction activities have permanently ceased or when final grades are reached in any portion of the site, stabilization and protection practices as specified in Chapter 5 of the Guidelines or as approved by the commissioner or his/ her designated agent shall be implemented within seven days. Areas that will remain disturbed but inactive for at least thirty days shall receive temporary seeding or soil protection within seven days in accordance with the Guidelines.

Areas that will remain disturbed beyond the seeding season as identified in the Guidelines, shall receive long-term, non-vegetative stabilization and protection sufficient to protect the site through the winter. In all cases, stabilization and protection measures shall be implemented as soon as possible in accordance with the Guidelines or as approved by the commissioner or his/ her designated agent.

A reverse slope bench is required for any slope steeper than 3:1 (horizontal: vertical) that exceeds 15 feet vertically, except when engineered slope stabilization structures or measures are included or a detailed soil mechanics analysis has been conducted to verify stability. Engineered analyses and measures must be designed by a CT licensed Professional Engineer with experience in geotechnical engineering or soil mechanics.

(ii) Structural Measures

The Plan shall include a narrative and drawings of structural measures to divert flows away from exposed soils, store flows or otherwise limit runoff and minimize the discharge of pollutants from the site. Unless otherwise specifically approved in writing by the commissioner or his/ her designated agent, or if otherwise authorized by another state or federal permit, structural measures shall be installed on upland soils.

For points of discharge from disturbed sites with a total contributing drainage area of between two to five acres, a temporary sediment trap must be installed in accordance with the Guidelines. For points of discharge from disturbed sites with a total contributing drainage area greater than five acres, a temporary basin must be designed and installed in accordance with the Guidelines. Such trap(s) or basin(s) must be maintained until final stabilization of the contributing area as defined in "Notice of Termination" (Section 6(a)).

The requirement for sediment traps or basins shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the temporary sediment trap or basin. Any exceptions must be approved in writing by the commissioner or his/ her designated agent.

(iii) Maintenance

The Plan shall include a narrative of the procedures to maintain in good and effective operating conditions all erosion and sediment control measures, including vegetation, and all other protective measures identified in the site plan. Maintenance of all erosion and sediment controls shall be performed in accordance with the Guidelines, or more frequently as necessary, to protect the waters of the state from pollution.

(B) Dewatering Wastewaters

Dewatering wastewaters shall be managed in accordance with the Guidelines. Dewatering wastewaters discharged to surface waters shall be discharged in a manner that minimizes the discoloration of the receiving waters. The Plan shall include a narrative and drawings of the

operational and structural measures that will be used to ensure that all dewatering wastewaters will not cause scouring or erosion or contain suspended solids in amounts that could reasonably be expected to cause pollution of surface waters of the State. Unless otherwise specifically approved in writing by the commissioner or his/ her designated agent, or if otherwise authorized by another state or federal permit, dewatering measures shall be installed on upland soils.

No discharge of dewatering wastewater(s) shall contain or cause a visible oil sheen, floating solids, or foaming in the receiving water.

(C) Post-Construction Stormwater Management

The Plan shall include a narrative and drawings of measures that will be installed during the construction process to minimize the discharge of pollutants in stormwater discharges that will occur after construction operations have been completed. Post-construction stormwater management measures shall be designed and implemented in accordance with the Stormwater Quality Manual, the DOT Qualified Products List or as approved by the commissioner or his/ her designated agent in writing. Unless otherwise specifically provided by the commissioner in writing, or authorized by another state or federal permit, structural measures shall be placed on upland soils. The Plan shall include provisions to address the long-term maintenance of any post-construction stormwater management measure installed.

(i) Post-Construction Performance Standards

The permittee shall utilize runoff reduction practices (as defined in Section 2) to meet runoff volume requirements based on the conditions below. For sites unable to comply with these conditions, the commissioner, at the commissioner's sole discretion, may require the submission of an individual permit in lieu of authorization under this general permit.

(a) Redevelopment

For sites that are currently developed with an effective impervious cover of forty percent or more and for which the permittee is proposing redevelopment, the permittee shall design the site in such a manner as to retain on-site half the water quality volume (as defined in Section 2) for the site and provide additional stormwater treatment without retention for discharges up to the full water quality volume for sediment, floatables and nutrients to the maximum extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice. In cases where the permittee is not able to retain half the water quality volume, the permittee shall design the redevelopment to retain runoff volume to the maximum extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice. In such cases, additional stormwater treatment up to the full water quality volume is still required. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual. If retention of the half the water quality volume is not achieved, the permittee shall submit a report to the commissioner describing: the measures taken to maximize runoff reduction practices on the site; the reasons why those practices constitute the maximum extent achievable; the alternative retention volume; and a description of the measures used to provide additional stormwater treatment above the alternate volume up to the water quality volume. In the case of linear redevelopment projects (e.g. roadway reconstruction or widening) for the developed portion of

the right of way: (1) for projects that may be unable to comply with the full retention standard, the alternate retention and treatment provisions may also be applied as specified above, or (2) for projects that will not increase the effective impervious cover within a given watershed, the permittee shall implement the additional stormwater treatment measures referenced above, but will not be required to retain half of the water quality volume.

(b) Other Development

The following performance standard applies to all sites that are currently undeveloped or are currently developed with less than forty percent effective impervious cover. For these sites, the permittee shall design the site to retain the water quality volume for the site. If there are site constraints that would prevent retention of this volume on-site (e.g., brownfields, capped landfills, bedrock, elevated groundwater, etc.), documentation must be submitted, for the commissioner's review and written approval, which: explains the site limitations; provides a description of the runoff reduction practices implemented; provides an explanation of why this constitutes the maximum extent achievable; offers an alternative retention volume; and provides a description of the measures used to provide additional stormwater treatment for sediment, floatables and nutrients above the alternate volume up to the water quality volume. Any such treatment shall be designed, installed and maintained in accordance with the Stormwater Quality Manual. In the case of linear projects that do not involve impervious surfaces (e.g. electrical transmission rights-of-way or natural gas pipelines), retention of the water quality volume is not required as long as the post-development runoff characteristics do not differ significantly from pre-development conditions.

(ii) Post-Construction Control Measures

(a) Runoff Reduction and Low Impact Development ("LID") Practices

The site design shall incorporate runoff reduction practices, low impact development ("LID") practices or other measures to meet the performance standards in subsection (i) above, promote groundwater recharge and minimize post-construction impacts to water quality. Please refer to Appendix B for additional guidance information.

(b) Suspended Solids and Floatables Removal

The permittee shall install post-construction stormwater management measures designed to minimize the discharge of suspended solids and floatables (e.g. oil and grease, other floatable liquids, floatable solids, trash, etc.) from stormwater. A goal of 80 percent removal of the annual sediment load from the stormwater discharge shall be used in designing and installing stormwater management measures. The Plan shall provide calculations supporting the capability of such measures in achieving this goal and any third-party verification, as applicable, of the sediment removal efficiencies of such measures. This goal is not intended to limit local approval authorities from requiring a higher standard pursuant to local requirements.

(c) Velocity Dissipation

Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow to the receiving watercourse so that the natural physical and biological characteristics and functions are maintained and protected.

(D) Other Controls

The following additional controls shall be implemented:

(i) Waste Disposal: Best management practices shall be implemented to minimize the discharge of litter, debris, building materials, hardened concrete waste, or similar materials to waters of the State. A narrative of these practices shall be provided in the Plan.

(ii) Washout Areas

Washout of applicators, containers, vehicles and equipment for concrete, paint and other materials shall be conducted in a designated washout area. There shall be no surface discharge of washout wastewaters from this area. Such washout shall be conducted: (1) outside of any buffers and at least 50 feet from any stream, wetland or other sensitive resource; or (2) in an entirely self-contained washout system. The permittee shall clearly flag off and designate areas to be used for washing and conduct such activities only in these areas. The permittee shall direct all washwater into a container or pit designed such that no overflows can occur during rainfall or after snowmelt.

In addition, dumping of liquid wastes in storm sewers is prohibited. The permittee shall remove and dispose of hardened concrete waste consistent with practices developed for the "Waste Disposal" section (subparagraph 5(b)(2)(D)(i), above). At least once per week, the permittee must inspect any containers or pits used for washout to ensure structural integrity, adequate holding capacity, and to check for leaks or overflows. If there are signs of leaks, holes or overflows in the containers or pits that could lead to a discharge, the permittee shall repair them prior to further use. For concrete washout areas, the permittee shall remove hardened concrete waste whenever the hardened concrete has accumulated to a height of ½ of the container or pit or as necessary to avoid overflows. A narrative of maintenance procedures and a record of maintenance and inspections shall be included in the Plan.

(iii) Off-site vehicle tracking of sediments and the generation of dust shall be minimized. Wet dust suppression shall be used, in accordance with section 22a-174-18(b) of the Connecticut General Statutes, for any construction activity that causes airborne particulates. The volume of water sprayed for controlling dust shall be minimized so as to prevent the runoff of water. No discharge of dust control water shall contain or cause a visible oil sheen, floating solids, visible discoloration, or foaming in the receiving stream.

(iv) All post-construction stormwater structures shall be cleaned of construction sediment and any remaining silt fence shall be removed upon stabilization of the site.

(v) All chemical and petroleum product containers stored on the site (excluding those contained within vehicles and equipment) shall be provided with impermeable containment which will hold at least 110% of the volume of the largest container, or

10% of the total volume of all containers in the area, whichever is larger, without overflow from the containment area. All chemicals and their containers shall be stored under a roofed area except for those chemicals stored in containers of 100 gallon capacity or more, in which case a roof is not required. Double-walled tanks satisfy this requirement.

(3) Additional Control Measures for Impaired Waters

For construction activities that discharge directly to impaired waters, as specified in “New Discharges to Impaired Waters” (Section 3(b)(12)), the Plan shall include the following provisions:

- (A) In lieu of the provisions of “Construction Sequencing” (Section 5(b)(1)(B)(iii)), no more than 3 acres may be disturbed at any one time. For those areas for which construction activity will be temporarily suspended for a period of greater than 14 days, temporary stabilization measures shall be implemented within 3 days of such suspension of activity. For all areas, permanent stabilization shall be implemented within 30 days of disturbance; *or*
- (B) The Plan shall document that measures are in place to ensure that there will be no discharge to the impaired water from rain events up to a 2-year, 24-hour rain event while construction activity is occurring; *or*
- (C) For discharges to impaired waters with an established TMDL:
 - (i) the Plan shall document that there is sufficient remaining Waste Load Allocation (WLA) in the TMDL to allow the discharge, *and*
 - (ii) measures shall be implemented to ensure the WLA will not be exceeded, *and*
 - (iii) stormwater discharges shall be monitored, if applicable, for any indicator pollutant identified in the TMDL for every rain event that produces a discharge to ensure compliance with the WLA. Such monitoring shall be in addition to the requirements specified in Section 5(c), *or*
 - (iv) the specific requirements for stormwater discharges specified in the TMDL are met.

Construction activities discharging to impaired waters that do not comply with this subsection are not authorized by this general permit.

(4) Inspections

All construction activities submitting a registration for this general permit shall be inspected initially for Plan implementation and then weekly for routine inspections.

(A) Plan Implementation Inspections

Within the first 30 days following commencement of the construction activity on the site, the permittee shall contact: (1) the appropriate District; or (2) a qualified soil erosion and sediment control professional or a qualified professional engineer to inspect the site. The site shall be inspected at least once and no more than three times during the first 90 days to confirm compliance with the general permit and proper initial implementation of all controls measures designated in the Plan for the site for the initial phase of construction. For sites not inspected by District personnel, the following conditions shall apply:

- (i) for projects disturbing more than one acre and less than fifteen (15) acres, the inspector shall be someone who:
 - (a) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant, and
 - (b) has no ownership interest of any kind in the project for which the registration is being submitted.
- (ii) for projects disturbing fifteen (15) acres or more, the inspector shall be someone who:
 - (a) is not an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the registrant, and
 - (b) has not engaged in any activities associated with the preparation, planning, designing or engineering of such plan for soil erosion and sediment control or plan for engineered stormwater management systems on behalf of such registrant, and
 - (c) is not under the same employ as any person who engaged in any activities associated with the preparation, planning, designing or engineering of such plans and specifications for soil erosion and sediment control or plans and specifications for engineered stormwater management systems on behalf of such registrant, and
 - (d) has no ownership interest of any kind in the project for which the registration is being submitted.

The permittee may use, if they wish, the same person(s) that provided the Plan Review Certification pursuant to Section 5(b)(11).

(B) Routine Inspections

The permittee shall routinely inspect the site for compliance with the general permit and the Plan for the site until a Notice of Termination has been submitted. Inspection procedures for these routine inspections shall be addressed and implemented in the following manner:

- (i) The permittee shall maintain a rain gauge on-site to document rainfall amounts. At least once a week and within 24 hours of the end of a storm that generates a discharge, a qualified inspector (provided by the permittee), as defined in the “Definitions” section (Section 2) of this general permit, shall inspect, at a minimum, the following: disturbed areas of the construction activity that have not been finally stabilized; all erosion and sedimentation control measures; all structural control measures; soil stockpile areas; washout areas and locations where vehicles enter or exit the site. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and impacts to the receiving waters. Locations where vehicles enter or exit the site shall also be inspected for evidence of off-site sediment tracking. For storms that end on a weekend, holiday or other time after which normal working hours will not commence within 24 hours, an inspection is required within 24 hours only for storms that equal or exceed 0.5 inches. For storms of less than 0.5 inches, an inspection shall occur immediately upon the start of the subsequent normal working hours. Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.
- (ii) The qualified inspector(s) shall evaluate the effectiveness of erosion and sediment controls, structural controls, stabilization practices, and any other controls implemented

to prevent pollution and determine if it is necessary to install, maintain, or repair such controls and/or practices to improve the quality of stormwater discharge(s).

- (iii) A report shall be prepared and retained as part of the Plan. This report shall summarize: the scope of the inspection; name(s) and qualifications of personnel making the inspection; the date(s) of the inspection; weather conditions including precipitation information; major observations relating to erosion and sediment controls and the implementation of the Plan; a description of the stormwater discharge(s) from the site; and any water quality monitoring performed during the inspection. The report shall be signed by the permittee or his/her authorized representative in accordance with the "Certification of Documents" section (subsection 5(i)) of this general permit.

The report shall include a statement that, in the judgment of the qualified inspector(s) conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the Plan and permit. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance. Non-engineered corrective actions (as identified in the Guidelines) shall be implemented on site within 24 hours and incorporated into a revised Plan within three (3) calendar days of the date of inspection unless another schedule is specified in the Guidelines. Engineered corrective actions (as identified in the Guidelines) shall be implemented on site within seven (7) days and incorporated into a revised Plan within ten (10) days of the date of inspection, unless another schedule is specified in the Guidelines or is approved by the commissioner. During the period in which any corrective actions are being developed and have not yet been fully implemented, interim measures shall be implemented to minimize the potential for the discharge of pollutants from the site.

- (iv) Inspectors from the DEEP and the appropriate District may inspect the site for compliance with this general permit at any time construction activities are ongoing and upon completion of construction activities to verify the final stabilization of the site and/or the installation of post-construction stormwater management measures pursuant to Section 6(a).
- (v) Additional inspections, reports and documentation may also be required to comply with the "Monitoring Requirements" section (Section 5(c)).

(5) Keeping Plans Current

The Permittee is responsible for keeping their Plan in compliance with this general permit at all times. This may involve any or all of the following:

- (A) The permittee shall amend the Plan if the actions required by the Plan fail to prevent pollution or fail to otherwise comply with any other provision of this general permit. The Plan shall also be amended whenever there is a change in contractors or subcontractors at the site, or a change in design, construction, operation, or maintenance at the site which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the Plan.
- (B) The commissioner may notify the permittee at any time that the Plan and/or the site do not meet one or more of the minimum requirements of this general permit. Within 7 days of such notice, or such other time as the commissioner may allow, the permittee shall make the required changes to the Plan and perform all actions required by such revised Plan. Within 15 days of such notice, or such other time as the commissioner may allow, the permittee shall submit to the commissioner a written certification that the requested changes have been

made and implemented and such other information as the commissioner requires, in accordance with the ‘Duty to Provide Information’ and ‘Certification of Documents’ sections (subsections 5(h) and 5(i)) of this general permit.

- (C) For any stormwater discharges authorized under any previous version of this general permit, the existing Plan shall be updated by February 1, 2014, as applicable, in accordance with the “Development and Contents of the Plan” (subsection 5(b)(1)), “Stormwater Control Measures” (subsection 5(b)(2)), “Routine Inspections” (subsection 5(b)(4)(B)), and “Monitoring” (subsection 5(c)) sections of this general permit, except for the post-construction measures in subsection 5(b)(2)(C)(i)(a) & (b) and 5(b)(2)(C)(ii)(a). The permittee shall maintain compliance with such Plan thereafter. For previously authorized sites discharging to impaired waters or other sensitive areas, the commissioner may require additional control measures or provide authorization under an individual permit pursuant to Sections 4(h) and 3(i).

(6) Failure to Prepare, Maintain or Amend Plan

In no event shall failure to complete, maintain or update a Plan, in accordance with the “Development of Contents of the Plan” and “Keeping Plans Current” sections (subsections 5(b)(1) and 5(b)(5)) of this general permit, relieve a permittee of responsibility to implement any actions required to protect the waters of the state and to comply with all conditions of the permit.

(7) Plan Signature

The Plan shall be signed and certified as follows:

- (A) The Plan shall be signed by the permittee in accordance with the “Certification of Documents” section (subsection 5(i)) of this general permit.
- (B) The Plan shall include certification by all contractors and subcontractors in accordance with the “Contractors” section (subsection 5(b)(1)(B)(viii)) of this general permit.
- (C) The Plan shall include a copy of the certification by a professional engineer or landscape architect made in accordance with Section 3(b)(9) of this general permit.

(8) Plan Review Certification

For a locally approvable project pursuant to Section 3(c) of this general permit, a copy of the Plan review certification made in accordance with either Section 3(b)(10) or (11) shall be maintained with the Plan. Note that construction activities reviewed and certified pursuant to those sections are still subject to the local erosion and sediment control and stormwater management regulations of the municipality in which the activity is conducted.

(9) Plan Submittal

The Plan shall be submitted to the commissioner and other certain parties under the following conditions:

- (A) All Locally Exempt Projects with greater than one acre of soil disturbance shall submit an electronic copy of the Plan and a completed Registration Form to the commissioner.
- (B) For all other projects, the permittee shall provide a copy of the Plan, and a completed Registration Form for this general permit to the following persons immediately upon request:

- (i) The commissioner at his or her request or at the request of a member of the public during the registration and Plan availability period pursuant to Section 4(e);
- (ii) The municipal planning commission, zoning commission and/or inland wetlands agency, or its respective enforcement officer or designated agent;
- (iii) In the case of a stormwater discharge through a municipal separate storm sewer system, the municipal operator of the system;
- (iv) In the case of a stormwater discharge located within a public drinking water supply watershed or aquifer area, the water company responsible for that water supply.

DO NOT SUBMIT any pages or other material that do not pertain to stormwater management or erosion and sedimentation control (such as electrical and lighting plans, boundary or lot surveys, building plans, non-stormwater related detail sheets, etc.).

(c) Monitoring Requirements

The primary requirements for monitoring turbidity are summarized in the table below:

Table 1

<i>Area of Soil Disturbance</i>	<i>Monitoring Required?</i>	<i>Monitoring Frequency</i>	<i>Sample Method</i>
Sites which disturb 1 acre or more, but less than 5 acres	Only IF a Registration is required	Monthly IF a Registration is required	Procedure consistent with 40 CFR Part 136
Sites which disturb 5 acres or more	Yes	Monthly	Procedure consistent with 40 CFR Part 136

(1) Turbidity Monitoring Requirements

(A) Monitoring Frequency

- (i) Sampling shall be conducted in accordance with Table 1, above, at least once every month, when there is a discharge of stormwater from the site while construction activity is ongoing, until final stabilization of the drainage area associated with each outfall is achieved.
- (ii) The permittee is only required to take samples during normal working hours as defined in Section 2. The site’s normal working hours must be identified in the Plan pursuant to Section 5(b)(1)(B)(vii). If sampling is discontinued due to the end of normal working hours, the permittee shall resume sampling the following morning or the morning of the next working day following a weekend or holiday, as long as the discharge continues.
- (iii) Sampling may be temporarily suspended any time conditions exist that may reasonably pose a threat to the safety of the person taking the sample. Such conditions may include high winds, lightning, impinging wave or tidal activity, intense rainfall or other

hazardous condition. Once the unsafe condition is no longer present, sampling shall resume.

(iv) If there is no stormwater discharge during a month, sampling is not required.

(B) Sample Collection

- (i) All samples shall be collected from discharges resulting from a storm event that occurs at least 24 hours after any previous storm event generating a stormwater discharge. Any sample containing snow or ice melt must be identified on the Stormwater Monitoring Report form. Sampling of snow or ice melt in the absence of a storm event is not a valid sample.
- (ii) Samples shall be grab samples taken *at least* three separate times during a storm event and shall be *representative* of the flow and characteristics of the discharge(s). Samples may be taken manually or by an in-situ turbidity probe or other automatic sampling device equipped to take individual turbidity readings (i.e. not composite). The first sample shall be taken within the first hour of stormwater discharge from the site. In cases where samples are collected manually and the discharge begins outside of normal working hours, the first sample shall be taken at the start of normal working hours.

(C) Sampling Locations

(i) Sampling is required of all point source discharges of stormwater from disturbed areas except as may be modified for linear projects under subparagraph (ii) below. Where there are two or more discharge points that discharge substantially identical runoff, based on similarities of the exposed soils, slope, and type of stormwater controls used, a sample may be taken from just one of the discharge points. In such case, the permittee shall report that the results also apply to the substantially identical discharge point(s). No more than 5 substantially identical outfalls may be identified for one representative discharge. If such project is planned to continue for more than one year, the permittee shall rotate twice per year the location where samples are taken so that a different discharge point is sampled every six months. The Plan must identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations.

(ii) Linear Projects

For a linear project, as defined in Section 2, the protocols of subparagraph (i), above, shall apply except that up to 10 substantially identical outfalls may be identified for one representative discharge.

(iii) All sampling point(s) shall be identified in the Plan and be clearly marked in the field with a flag, stake, or other visible marker.

(D) Sampling and analysis shall be prescribed by 40 CFR Part 136.

(E) Turbidity Values

The stormwater discharge turbidity value for each sampling point shall be determined by taking the average of the turbidity values of all samples taken at that sampling point during a given storm.

(2) Stormwater Monitoring Reports

- (A) Within thirty (30) days following the end of each month, permittees shall enter the stormwater sampling result(s) on the Stormwater Monitoring Report (SMR) form (available at www.ct.gov/deep/stormwater) and submit it in accordance with the NetDMR provisions in subsection F, below, or, if the permittee has opted out of NetDMR, to the following address:

Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division (Attn: DMR Processing)
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

- (B) If there was no discharge during any given monitoring period, the permittee shall submit the form as required with the words “no discharge” entered in place of the monitoring results.
- (C) If the permittee monitors any discharge more frequently than required by this general permit, the results of this monitoring shall be included in additional SMRs for the month in which the samples were collected.
- (D) If sampling protocols are modified due to the limitations of normal working hours or unsafe conditions in accordance with Section 5(c)(1)(A)(ii) or (iii) above, a description of and reason for the modifications shall be included with the SMR.
- (E) If the permittee samples a discharge that is representative of two or more substantially identical discharge points, the permittee shall include the names or locations of the other discharge points.
- (F) NetDMR Reporting Requirements

- (i) Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit stormwater monitoring reports through a secure internet connection. Unless otherwise approved in writing by the commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

(a) Submittal of NetDMR Subscriber Agreement

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee’s discharge monitoring reports (“Signatory Authority”) as described in RCSA Section 22a-430-3(b)(2) shall contact the Department at deep.netdmr@ct.gov and initiate the NetDMR subscription process for electronic submission of Stormwater Monitoring Report information. Information on NetDMR is available on the Department’s website at www.ct.gov/deep/netdmr. On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the *Connecticut DEEP NetDMR Subscriber Agreement* to the Department.

(b) Submittal of Reports Using NetDMR

Unless otherwise approved by the commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit SMRs required under this permit to the Department using NetDMR in satisfaction of the SMR submission requirements of Sections 5(c)(2)(A) of this permit.

SMRs shall be submitted electronically to the Department no later than the 30th day of the month following the completed reporting period. Any additional monitoring conducted in accordance with 40 CFR 136 shall be submitted to the Department as an electronic attachment to the SMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of SMRs to the Department. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

(c) Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting SMRs, the commissioner may approve the submission of SMRs in hard copy form (“opt-out request”). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing SMRs using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department’s approval and shall thereupon expire. At such time, SMRs shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at deep.netdmr@ct.gov:

Attn: NetDMR Coordinator
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(d) *Reporting and Record Keeping Requirements*

- (1) For a period of at least five years from the date that construction is complete, the permittee shall retain copies of the Plan and all reports required by this general permit, and records of all data used to complete the registration for this general permit, unless the commissioner specifies another time period in writing. Inspection records must be retained as part of the Plan for a period of five (5) years after the date of inspection.
- (2) The permittee shall retain an updated copy of the Plan required by this general permit at the construction site from the date construction is initiated at the site until the date construction at the site is completed.

(e) *Regulations of Connecticut State Agencies Incorporated into this General Permit*

The permittee shall comply with sections 22a-430-3 and 22a-430-4 of the Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein.

(f) *Reliance on Registration*

In evaluating the registrant's registration, the commissioner has relied on information provided by the registrant. If such information proves to be false or incomplete, any authorization reliant on such information may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

(g) *Duty to Correct and Report Violations*

Upon learning of a violation of a condition of this general permit, unless otherwise specified in this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct and mitigate the results of such violation, prevent further such violation, and report in writing such violation and such corrective action to the commissioner within five (5) days of the permittee's learning of such violation. Such information shall be filed in accordance with the "Certification of Documents" section (Section 5(i)) of this general permit.

(h) *Duty to Provide Information*

If the commissioner requests any information pertinent to the construction activity or to compliance with this general permit or with the permittee's authorization under this general permit, the permittee shall provide such information within fifteen (15) days of such request or other time period as may be specified in writing by the commissioner. Such information shall be filed in accordance with the "Certification of Documents" section (Section 5(i)) of this general permit.

(i) *Certification of Documents*

Unless otherwise specified in this general permit, any document, including but not limited to any notice, information or report, which is submitted to the commissioner under this general permit shall be signed by the permittee, or a duly authorized representative of the permittee, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

(j) *Date of Filing*

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word "day" as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

(k) *False Statements*

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes.

(l) *Correction of Inaccuracies*

Within fifteen (15) days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be filed in accordance with the certification requirements prescribed in Section 5(i) of this general permit.

(m) *Transfer of Authorization*

Any authorization issued by the commissioner under this general permit is transferable only in accordance with the provisions of section 22a-6o of the General Statutes. Any person or municipality proposing to transfer any such authorization shall submit a license transfer form to the commissioner. The transferee is not authorized to conduct any activities under this general permit until the transfer is approved by the commissioner (typically 30 days). The transferee may adopt by reference the Plan developed by the transferor. The transferee shall amend the Plan as required by the “Keeping Plans Current” Section 5(b)(5) of this general permit).

(n) *Reopener*

At such time as the USEPA may institute a new rule for post-construction stormwater management or modify the requirements for their National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities (CGP) to institute a numeric Effluent Limitation Guideline (ELG) for turbidity in stormwater discharges from construction activities, the commissioner may reopen this general permit pursuant to the Section 40 Part 122.62(a) of the Code of Federal Regulations for implementation of these elements.

(o) *Other Applicable Law*

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

(p) *Other Rights*

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or construction activity affected by such general permit. In conducting any construction activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

Section 6. Termination Requirements

(a) *Notice of Termination*

At the completion of a construction project registered pursuant to the “Registration Requirements” section (Section 4) of this general permit, a Notice of Termination must be filed with the commissioner. A project shall be considered complete after all post-construction measures are installed, cleaned and functioning and the site has been stabilized for at least three months following the cessation of construction activities. A site is considered stabilized when there is no active erosion or sedimentation present and no disturbed areas remain exposed **for all phases**.

(1) Post-Construction Inspection

For locally approvable projects, once all post-construction stormwater measures have been installed in accordance with the Post-Construction Stormwater Management section (subsection 5(b)(2)(C)) and cleaned of any construction sediment or debris, the registrant shall contact the appropriate Conservation District or a qualified soil erosion and sediment control professional and/or a qualified professional engineer, as appropriate, who will inspect the site to confirm compliance with these post-construction stormwater measures. This person(s) shall not be an employee, as defined by the Internal Revenue Service in the Internal Revenue Code of 1986, of the permittee and shall have no ownership interest of any kind in the project for which the site’s registration was submitted.

(2) Final Stabilization Inspection

For all projects, once the site has been stabilized for at least three months, the registrant shall have the site inspected by a qualified inspector to confirm final stabilization. The registrant shall indicate compliance with this requirement on the Notice of Termination form.

(b) *Termination Form*

A termination notice shall be filed on forms prescribed and provided by the commissioner and shall include the following:

- (1) The permit number as provided to the permittee on the permit certificate.
- (2) The name of the registrant as reported on the general permit registration form (DEEP-PED-REG-015).
- (3) The address of the completed construction site.
- (4) The dates when:
 - (A) All storm drainage structures were cleaned of construction debris pursuant to the “Other Controls” section (subsection 5(b)(2)(D)) of this general permit; and
 - (B) The post-construction inspection was conducted pursuant to subsection 6(a)(1), above; and
 - (C) The date of completion of construction; and
 - (D) The date of the final stabilization inspection pursuant to subsection 6(a)(2), above.
- (5) A description of the post-construction activities at the site.

(6) Signatures of:

(A) The permittee; and

(B) The person certifying the post-construction inspection pursuant to subsection 6(a)(1), above.

(c) *Where to File a Termination Form*

A termination form shall be filed with the commissioner at the following address:

CENTRAL PERMITS PROCESSING UNIT
BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Section 7. Commissioner's Powers

(a) *Abatement of Violations*

The commissioner may take any action provided by law to abate a violation of this general permit, including but not limited to penalties of up to \$25,000 per violation per day under Chapter 446k of the Connecticut General Statutes, for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

(b) *General Permit Revocation, Suspension, or Modification*

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) *Filing of an Individual Permit Application*

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit if he wishes to continue lawfully conducting the construction activity, the permittee shall file an application for an individual permit within thirty (30) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall continue to comply with the terms and conditions of this general permit. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued:

August 21, 2013


Daniel C. Esty
Commissioner

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX A

Endangered and Threatened Species

In order to be eligible for coverage under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (“GP” or “the GP”), under section 3(b)(2) of the GP, a registrant must ensure that the construction activity, which includes, but is not limited to, excavation, site development or other ground disturbance activities, and stormwater flow, discharges and control measures (“construction activity”), does not threaten the continued existence of any state or federal species listed as endangered or threatened (“listed species”) or result in the destruction or adverse modification of any habitat associated with such species.

In order to prevent significant, unforeseen delays in the processing of a registration under the GP, registrants should assess compliance with section 3(b)(2) early in the planning stages of a project. The Department of Energy and Environmental Protection (“the Department”) strongly recommends that this assessment *be initiated up to one year, or more*, prior to the projected construction initiation date, and even before the purchase of the site of the construction activity. At a minimum, registrants must assess compliance with section 3(b)(2) prior to submission of the Registration Form for the GP.

This Appendix describes the ways that a registrant can comply with section 3(b)(2) of the GP. In connection with the filing of a registration a registrant can perform a self-assessment described in Section 1, seek a limited one-year determination or a safe harbor determination from the Department’s Wildlife Division under Sections 2 or 3, respectively, or stipulate in writing to the presence of listed species or any habitat associated with such species and develop a mitigation plan pursuant to Section 5 of this Appendix. While some means of compliance are more limited than others, the options set out in this Appendix are not mutually exclusive and all options remain available to a registrant. For example, a registrant may perform a self-assessment under Section 1 and seek a safe harbor determination under Section 3 of this Appendix. Provided the requirements of this Appendix are met, the choice of how to proceed is the registrant’s.

Section 1. Self Assessment through Natural Diversity Database Map Review and Screening

Before submission of a registration for coverage under this GP, a registrant must review the current versions of the Department’s Natural Diversity Data Base (“NDDB”) maps. Except as provided for in Sections 2, 3 or 5 of this Appendix, such review must occur no more than six months before such submission. Such review provides a method for screening whether the Department is already aware of listed species that may be present on the site of the construction activity. These maps can be viewed at the following locations:

1. Online at the following links:

[CT DEEP Natural Diversity Data Base Maps](#)
[CTECO Webpage](#) (in the interactive Simple Map Viewer)

2. At the DEEP Public File Room at 79 Elm Street in Hartford.

Screening

The site of the construction activity must be compared to the shaded areas depicted on the NDDDB map to determine if the site is entirely, partially, or within ¼ mile of a shaded area. If the site is entirely, partially or within a ¼ mile of a shaded area for a listed species a registrant can only achieve compliance with section 3(b)(2) of the GP by obtaining a limited one-year determination under Section 2, a safe harbor determination under Section 3, or an approved mitigation plan under Section 5 of this Appendix from the Department's Wildlife Division.

If the site of the construction activity is not entirely, partially or within ¼ mile of a shaded area, then the Department is not aware of any listed species at the site of the construction activity. Based upon this screening, and provided the registrant has no reasonably available verifiable, scientific or other credible information that the construction activity could reasonably be expected to violate section 3(b)(2) of the GP, when completing the Registration Form for this GP a registrant may check the box that indicates that the construction activity will not impact federal or state listed species.

A registrant using only self-assessment under this section may utilize the results of any such self assessment for up to, but no more than, six months from the date of such assessment. Note, however, that the NDDDB maps are not the result of comprehensive state-wide field investigations, but rather serve as a screening tool. Using such maps as a screening tool does not provide a registrant with an assurance that listed species or their associated habitat may not be encountered at the site of the construction activity. Notwithstanding the NDDDB screening results, if a listed species is encountered at the site of the construction activity, the registrant shall promptly contact the Department and may need to take additional action to ensure that the registrant does not violate section 3(b)(2) of the GP.

Section 2. Obtaining a Limited One-Year Determination

A registrant may seek a written determination from the Department's Wildlife Division, good for one-year, that the proposed construction activity complies with section 3(b)(2) of the GP. To obtain this limited one-year determination, a registrant must, in addition to conducting the NDDDB map review in Section 1 of this Appendix, provide the Department's Wildlife Division with (1) any reasonably available verifiable, scientific or other credible information about whether the construction activity could reasonably be expected to result in a violation of section 3(b)(2) of the GP, and (2) limited information about the site of the proposed construction activity, but less information than would be necessary for a safe harbor determination under Section 3 of this Appendix. The limited information necessary for a one-year determination is on the current "Request for Natural Diversity Database (NDDDB) State Listed Species Review" form on the Department's website. The form and instructions for seeking such a limited one-year determination are available at www.ct.gov/DEEP/nddbrequest.

Provided the registrant's information is accurate and the Department's Wildlife Division determines that the construction activity will not violate section 3(b)(2) of the GP, the registrant shall receive a limited one-year determination from the Department. Any such determination may indicate that the construction activity will not impact listed species or their associated habitat, or it may include specific conditions to be implemented to avoid or significantly minimize any impacts that may be encountered at the site of the construction activity. For purposes of submitting a registration for the GP, any such limited one-year determination can be relied upon by the person receiving such determination for one-year from the date of such determination. Like, however, the NDDDB screening procedure in Section 1 of this Appendix, a limited one-year determination does not provide a registrant with an assurance that listed species or their associated habitat may not be encountered at the site of the construction activity. If a listed species is encountered, the registrant shall promptly contact the Department

and may need to take additional action to ensure that the construction activity does not violate section 3(b)(2) of the GP.

If a registrant receives a limited one-year determination from the Department, the registrant should check the limited one-year determination box on the GP registration form and include the Department's one-year limited determination letter if requested on the GP Registration form. Checking the limited one-year determination box on the registration form and failing to provide the determination letter from the Department's Wildlife Division, if requested on the GP Registration form, will delay and may prevent processing of a registration.

If based upon the information provided by a registrant seeking a limited one-year determination the Department's Wildlife Division determines that the construction activity could impact listed species or their associated habitat, or that the Department needs additional information to make a limited one-year determination, the registrant may still achieve compliance with section 3(b)(2) of the GP through providing additional information pursuant to Section 4 or developing a mitigation plan pursuant to Section 5 of this Appendix.

A registrant may request one or more one-year extensions to a limited one-year determination under this section. If the Department's Wildlife Division has prescribed a form for requesting an extension, any such request shall be made using the prescribed form. There is a presumption that requests for a one-year extension of a limited one-year determination shall be granted. However, this presumption can be rebutted if the Department determines that a change in any of the following has occurred since an initial limited one-year determination or any extension was granted: the construction activity affecting or potentially affecting listed species or their associated habitat; the NDDB maps for the site of the construction activity; the limited information upon which a limited one-year determination or any extension was granted; or other information indicative of a change in circumstance affecting listed species or their associated habitat. Any one-year extension granted under this paragraph shall run from the date the Department's Wildlife Division issues its determination to grant an extension and shall be treated as a limited one-year determination as provided for in this section. Any letter granting a one-year extension shall be included with a registration along with the original limited one-year determination as provided for in this section.

Section 3. Obtaining a Safe Harbor Determination

A registrant may seek a written determination from the Department's Wildlife Division, good for three years, with the potential to be extended for an additional year, that proposed construction activity complies with section 3(b)(2) of the GP. Any such determination shall constitute a "safe harbor" for purposes of section 3(b)(2) of the GP.

To obtain a safe harbor determination, a registrant must, in addition to conducting the NDDB review in section 1 of this Appendix, provide the Department's Wildlife Division with any reasonably available verifiable, scientific or other credible information about whether the construction activity could reasonably be expected to result in a violation of section 3(b)(2) of the GP and specific information about the site of the construction activity. The specific information necessary for a safe harbor determination is listed in Attachment A to this Appendix. This information must be sufficient to allow the Wildlife Division to adequately assess the site for potential risks to listed species and their associated habitat. While the Department recognizes certain information is necessary to make a safe harbor determination, it also recognizes that a registrant may need to obtain a safe harbor determination early in its project's approval process in order to make prudent business decisions about purchasing a site or proceeding to final project designs. The form and instructions for seeking a safe harbor determination are available at www.ct.gov/DEEP/nddbrequest.

Provided the registrant's information is accurate and the Department's Wildlife Division determines that the construction activity will not violate section 3(b)(2) of the GP, the registrant shall receive a safe harbor determination from the Department. A safe harbor determination may indicate that the construction activity will not impact listed species or their associated habitat, or it may include specific conditions to be implemented to avoid or significantly minimize any impacts that may be encountered at the site of the construction activity. The Department shall honor the safe harbor determination for three years from the date it is issued, meaning that unlike the NDDB review in Section 1 or the limited one-year determination in Section 2 of this Appendix, if the Department makes a safe harbor determination and a registrant remains in compliance with any conditions in any such determination, irrespective of what may be found at the site of the construction activity, a registrant shall be considered in compliance with section 3(b)(2) of the GP. However, a safe harbor determination shall not be effective if a construction activity may threaten the continued existence of any federally listed species or its critical habitat under federal law. If a federally listed species or its critical habitat is encountered on the site of the construction activity, the registrant shall promptly contact the Department and may need to take additional action to ensure that the construction activity does not violate federal law or section 3(b)(2) of the GP.

If a registrant receives a safe harbor determination from the Department, the registrant should check the safe harbor determination box on the GP registration form and include the Department's safe harbor determination if requested on the GP Registration form. Checking the safe harbor box on the registration form and failing to provide the safe harbor determination letter from the Department's Wildlife Division, if requested on the GP Registration form, will delay and may prevent processing of a registration.

If based upon the information provided by a registrant seeking a safe harbor determination the Department's Wildlife Division determines that the construction activity could impact listed species or their associated habitat, or that the Department needs additional information to make a safe harbor determination, the registrant may still achieve compliance with section 3(b)(2) of the GP through providing additional information pursuant to Section 4 or developing a mitigation plan pursuant to Section 5 of this Appendix.

If a registrant receives a safe harbor determination from the Department's Wildlife Division, anytime during the third year of such safe harbor, a registrant may request a one-year extension of that safe harbor. If the Department's Wildlife Division has prescribed a form for requesting an extension, any such request shall be made using the prescribed form. There is a presumption that a request for a one-year extension of a safe harbor shall be granted. However, this presumption can be rebutted if the Department determines that a change in any of the following has occurred since the safe harbor was granted: the construction activity affecting or potentially affecting listed species or their associated habitat; the NDDB maps for the site of the construction activity; the information upon which the safe harbor was granted; or other information indicative of a change in circumstance affecting listed species or their associated habitat. A registrant may seek only one extension, for one-year, to a safe harbor determination. Any one-year extension granted under this paragraph shall run from the date of the Department's Wildlife Division issues its determination to grant an extension and shall be honored by the Department in the same manner as a safe harbor determination noted above. Any letter granting a one-year extension shall be included with a registration along with the original limited safe harbor determination as provided for in this section.

Section 4. Providing Additional Information

For the Department's Wildlife Division to make a limited one-year determination under Section 2 or a safe harbor determination under section 3 of this Appendix, limited additional information may be required to determine if the construction activity would impact listed species or their associated habitat. If the species in question is a state listed endangered or threatened species under section 26-306 of the general statutes, a registrant shall, in consultation with the Department's Wildlife Division, provide the limited additional

information requested by the Department's Wildlife Division. Such information may include, but is not limited to, a survey of specific listed species in question. If the species in question is a federally listed threatened or endangered species, in addition to the Department's Wildlife Division, a registrant shall also consult with the U.S. Fish and Wildlife Service and shall provide any additional information requested by that agency. A registrant that initially sought or obtained a limited one-year determination may, after providing the additional information required under this section request a safe harbor determination under Section 3 of this Appendix.

At any time, as an alternative to proceeding under Section 2, 3 or 4 of this Appendix, a registrant may stipulate, in writing, to the presence of one or more listed species or their associated habitat. A registrant choosing this alternative shall proceed to develop a mitigation plan under Section 5 of this Appendix.

If based upon any additional information provided to the Department's Wildlife Division, and as applicable, the U.S. Fish & Wildlife Service, the Department's Wildlife division determines that construction activity will be in compliance with section 3(b)(2) of the GP, a registrant shall receive a limited one-year determination under Section 2 or a safe harbor determination under Section 3 of this Appendix, as applicable.

If the Department's Wildlife Division determines that additional information is necessary to determine if the construction activity has the potential to impact listed species or their associated habitat, and a registrant chooses to not provide such information, a registrant shall proceed with the self assessment through an NDDB review under Section 1 of this Appendix, or stipulate to the existence of a listed species or associated habitat and develop a mitigation plan under Section 5 or such registrant shall not be eligible to register under the GP.

Section 5. Developing a Mitigation Plan

The Department's Wildlife Division may determine that the construction activity has the potential to adversely impact listed species or their associated habitat. However, it may be possible to modify the construction activity or undertake certain on-site measures to avoid or significantly minimize such impacts. If the species or associated habitat in question is a state listed endangered or threatened species under section 26-306 of the general statutes, a registrant shall consult with the Department's Wildlife Division to determine if an acceptable mitigation plan can be developed so impacts can be avoided or minimized such that a registrant remains in compliance with section 3(b)(2). If the species in question is a federally listed threatened or endangered species, any such consultation shall also include the U.S. Fish and Wildlife Service.

If a registrant in consultation with the Department's Wildlife Division, and as applicable, the U.S. Fish & Wildlife Service, develops a mitigation plan that is approved by the Department's Wildlife Division, or as applicable, the U.S. Fish & Wildlife Service, the registrant shall receive a limited one-year determination under Section 2 or a safe harbor determination under Section 3 of this Appendix. In this situation, in addition to checking the one-year determination box or the safe harbor determination box, as applicable, on the registration form, the registrant shall also check the box on the registration form indicating that it has an approved mitigation plan and provide a status update on the registration form as to whether it has completed or is still in the process of implementing the approved mitigation plan.

If an approved mitigation plan has not been fully implemented by the time a registration is submitted, completing all remaining tasks in the plan shall become an enforceable condition of any registration issued to the registrant.

If the Department determines that the construction activity has the potential to adversely impact listed species or their associated habitat and the registrant and the Department, and as applicable, the U.S. Fish & Wildlife Service, are not able to agree on an acceptable mitigation plan that is approved by the Department, and as applicable, the U.S. Fish & Wildlife Service, any such registrant shall not be eligible to register under the GP.

APPENDIX A
ATTACHMENT A

Specific Information Needed to Apply for a Safe Harbor Determination

A Safe Harbor Determination will be made upon the submission of a detailed report that fully addresses the matters noted below. For the Department's Wildlife Division to make a safe harbor determination, the report should synthesize and analyze this information, not simply compile information. Those providing synthesis and analysis need appropriate qualifications and experience. A request for a safe harbor determination shall include:

1) Habitat Information, including GIS mapping overlays, identifying:

- wetlands, including wetland cover types;
- plant community types;
- topography;
- soils;
- bedrock geology;
- floodplains, if any;
- land use history; and
- water quality classifications/criteria.

2) Photographs - The report should also include photographs of the site, including all reasonably available aerial or satellite photographs and an analysis of such photographs.

3) Inspection - The report should include a visual inspection(s) of the site, preferably when the ground is visible. This inspection can also be helpful in confirming or further evaluating the items noted above.

4) Biological Surveys - The report should include all biological surveys of the site where construction activity will take place that are reasonably available to a registrant. A registrant shall notify the Department's Wildlife Division of biological studies of the site where construction activity will take place that a registrant is aware of but are not reasonably available to the registrant.

5) Based on items #1 through 4 above, the report shall include a Natural Resources Inventory of the site of the construction activity. This inventory should also include a review of reasonably available scientific literature and any recommendations for minimizing adverse impacts from the proposed construction activity on listed species or their associated habitat.

6) In addition, to the extent the following is available at the time a safe harbor determination is requested, a request for a safe harbor determination shall include and assess:

- Information on Site Disturbance Estimates/Site Alteration information
- Vehicular Use
- Construction Activity Phasing Schedules, if any; and
- Alternation of Drainage Patterns

General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX B

Connecticut Department of Energy & Environmental Protection Inland Water Resources Division Fact Sheet Considering Low Impact Development Principles in Site Design

In order to reduce the impact of development and address stormwater quality issues, the Department strongly encourages the use of Low Impact Development (LID) measures. LID is a site design strategy intended to maintain or replicate predevelopment hydrology through the use of small-scale controls, integrated throughout the site, to manage stormwater runoff as close to its source as possible. Infiltration of stormwater through LID helps to remove sediments, nutrients, heavy metals, and other types of pollutants from runoff.

Key Strategies for LID

Key strategies for effective LID include: infiltrating, filtering, and storing as much stormwater as feasible, managing stormwater close to where the rain/snow falls, managing stormwater at multiple locations throughout the landscape, conserving and restoring natural vegetation and soils, preserving open space and minimizing land disturbance, designing the site to minimize impervious surfaces, and providing for maintenance and education. Water quality and quantity benefits are maximized when multiple techniques are grouped together. In areas of compacted and/or possibly contaminated soils, soil suitability should be further investigated prior to selecting optimum treatment and/or remediation measures. Where soil conditions permit, the DEEP encourages the utilization of one, or a combination of, the following measures:

- the use of pervious pavement or grid pavers (which are very compatible for parking lot and fire lane applications), or impervious pavement without curbs or with notched curbs to direct runoff to properly designed and installed infiltration areas;
- the use of vegetated swales, tree box filters, and/or infiltration islands to infiltrate and treat stormwater runoff (from building roofs, roads, and parking lots);
- the minimization of access road widths and parking lot areas to the maximum extent possible to reduce the area of impervious surface;
- the use of dry wells to manage runoff from building roofs;
- incorporation of proper physical barriers or operational procedures for special activity areas where pollutants could potentially be released (e.g. loading docks, maintenance and service areas, dumpsters, etc.);
- the installation of rainwater harvesting systems to capture stormwater from building roofs for the purpose of reuse for irrigation (i.e. - rain barrels for residential use and cisterns for larger developments);
- the use of residential rain gardens to manage runoff from roofs and driveways;
- the use of vegetated roofs (green roofs) to detain, absorb, and reduce the volume of roof runoff; and
- providing for pollution prevention measures to reduce the introduction of pollutants to the environment.

The [2004 Stormwater Quality Manual LID Appendix](#) and the [2002 Erosion and Sediment Control Guidelines LID Appendix](#) both provide guidance on implementing LID measures. A guide to LID resources can also be found in the [DEEP Low Impact Development Resources Factsheet](#) (PDF).

LID in Urban Areas

If the proposed site is located in a highly urbanized area, it is likely underlain by urban land complex soils. The Natural Resources Conservation Service (NRCS) Soil Web Survey (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>) provides information on soil textures, parent materials, slopes, height of seasonal high water table, depth to restrictive layer, and permeability. In highly developed areas, infiltration may be limited due to the high percentage of impervious cover. However, infiltration practices may be suitable at urban sites depending on:

- Potential contamination of soils in historically industrialized areas. The siting of areas for infiltration must consider any existing soil or groundwater contamination.
- Site specific soil conditions. NRCS mapping consists of a minimum 3 acres map unit and soils may vary substantially within each mapping unit. Test pits should be dug in areas
- planned for infiltration practices to verify soil suitability and/or limitations.
- Investigation of areas of compacted soils and the utilization of proper construction staging. Planning should insure that areas to be used for infiltration are not compacted during the construction process by vehicles or machinery.

Even if infiltration is limited at a site, it is still possible to implement LID practices. Specifically, potential exists for the installation of green roofs on buildings and/or the use of cisterns to capture and reuse rainwater.

LID in Areas with a High Seasonal Water Table or Hardpan Layer

- The impact of stormwater runoff to any streams and/or wetlands near the site should be considered. Water quality treatment is influenced by hydraulic conductivity and time of travel. If stormwater infiltration is limited by an impermeable layer close to the surface, the water may run laterally through the ground and discharge to the stream or wetlands, providing limited water quality treatment. However, a longer time of travel may provide sufficient treatment. Proper soil testing for infiltration potential will increase the likelihood of successful BMP design.
- In areas with a high seasonal water table, bioretention areas/rain gardens should be planted with water tolerant/wetland plants. The presence of a high seasonal water table suggests that water may drain slowly or not at all during certain parts of the year. Planting native wetland vegetation will help to ensure plant survival and increase the effectiveness of bioretention practices. Information on native plantings that are both drought tolerant and tolerant of wet conditions can be found in The UConn Cooperative Extension System’s guide to building a rain garden at http://nemo.uconn.edu/publications/rain_garden_broch.pdf. Native plant lists for Connecticut can also be found at <http://www.fhwa.dot.gov/environment/rdsduse/ct.htm>.

LID Guidance for Federal Projects

- LID techniques have been utilized by Department of Defense (DoD) agencies during the last several years. The effectiveness of these projects in managing runoff as well as reducing construction and maintenance costs has created significant interest in LID. The DoD has created a Unified Facilities Criteria document, Low Impact Development that provides guidelines for integrating LID planning and design into a facility’s regulatory and resource protection programs. It is available on-line at: http://www.wbdg.org/ccb/DOD/UFC/ufc_3_210_10.pdf.
- Section 438 of the Energy Independence and Security Act (EISA) of 2007 requires federal agencies to reduce stormwater runoff from federal development projects to protect water resources. In December 2009, the EPA developed a technical guidance document on implementing the stormwater runoff requirements for federal projects under Section 438 of EISA. The document contains guidance on how compliance with Section 438 can be achieved, measured and evaluated and can be found at: http://www.epa.gov/owow/NPS/lid/section438/pdf/final_sec438_eisa.pdf.

For more information contact the CT DEEP Watershed Management/Low Impact Development Program:

Name	Area	Telephone
MaryAnn Nusom Haverstock	Program Oversight/ Low Impact Development	(860) 424-3347
Chris Malik	Watershed Manager	(860) 424-3959
Susan Peterson	Watershed Manager	(860) 424-3854
Eric Thomas	Watershed Manager	(860) 424-3548

List of Runoff Reduction/LID Practices

Re-Forestation
Disconnection of Rooftop Runoff
Disconnection of Non-Rooftop Runoff
Sheetflow to Conservation Areas
Green Roof
Permeable Pavement
Rainwater Harvesting
Submerged Gravel Wetlands
Micro-Infiltration
Rain Gardens
Bioretention
Landscape Infiltration
Grass Swales
Bio-swales
Wet Swales
Stormwater Ponds
Stormwater Wetlands
Stormwater Filtering Systems
Stormwater Infiltration



General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX C

AQUIFER PROTECTION AREAS AND OTHER GROUNDWATER DRINKING SUPPLY AREAS GUIDANCE INFORMATION

The Pollution Control Plan (“the Plan”) should consider measures to reduce or mitigate potential impacts to both ground water (aquifers) and surface waters, taking into consideration both quantity and quality of the runoff. The emphasis should be to minimize, to the extent possible, changes between pre-development and post-development runoff rates and volumes.

The basic stormwater principals for Aquifer Protection Areas (and other groundwater drinking supply areas) are to prevent inadvertent pollution discharges/releases to the ground, while encouraging recharge of stormwater where it does not endanger groundwater quality. Measures include:

- prevent illicit discharges to storm water, including fuel/chemical pollution releases to the ground;
- minimize impervious coverage and disconnect large impervious areas with natural or landscape areas;
- direct paved surface runoff to aboveground type land treatment structures – sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground;
- provide necessary impervious pavement in high potential pollutant release areas. These “storm water hot spots” include certain land use types or storage and loading areas, fueling areas, intensive parking areas and roadways (see table below);
- only use subsurface recharge structures such as dry wells, galleries, or leaching trenches, to directly infiltrate clean runoff such as rooftops, or other clean surfaces. These structures do not adequately allow for attenuation of salts, solvents, fuels or other soluble compounds in groundwater that may be contained in runoff; and
- restrict pavement deicing chemicals, or use an environmentally suitable substitute such as sand only, or alternative de-icing agents such as calcium chloride or calcium magnesium.

Infiltration of stormwater should be **restricted** under the following site conditions:

- **Land Uses or Activities with Potential for Higher Pollutant Loads:** Infiltration of stormwater from these land uses or activities (refer to Table 7-5 below), also referred to as stormwater “hotspots,” can contaminate public and private groundwater supplies. Infiltration of stormwater from these land uses or activities may be allowed by the review authority with appropriate pretreatment. Pretreatment could consist of one or a combination of the primary or secondary treatment practices described in the Stormwater Quality Manual provided that the treatment practice is designed to remove the stormwater contaminants of concern.
- **Subsurface Contamination:** Infiltration of stormwater in areas with soil or groundwater contamination such as brownfield sites and urban redevelopment areas can mobilize contaminants.
- **Groundwater Supply and Wellhead Areas:** Infiltration of stormwater can potentially contaminate groundwater drinking water supplies in immediate public drinking water wellhead areas.

Land Uses or Activities with Potential for Higher Pollutant Loads
 Table 7-5 of the 2004 Stormwater Quality Manual

<u>Land Use/Activities</u>	
<ul style="list-style-type: none"> • Industrial facilities subject to the DEEP Industrial Stormwater General Permit or the U.S. EPA National Pollution Discharge Elimination System (NPDES) Stormwater Permit Program • Vehicle salvage yards and recycling facilities • Vehicle fueling facilities (gas stations and other facilities with on-site vehicle fueling) • Vehicle service, maintenance, and equipment cleaning facilities • Fleet storage areas (cars, buses, trucks, public works) • Commercial parking lots with high intensity use (shopping malls, fast food restaurants, convenience stores, supermarkets, etc.) • Public works storage areas 	<ul style="list-style-type: none"> • Road salt storage facilities (if exposed to rainfall) • Commercial nurseries • Flat metal rooftops of industrial facilities • Facilities with outdoor storage and loading/unloading of hazardous substances or materials, regardless of the primary land use of the facility or development • Facilities subject to chemical inventory reporting under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA), if materials or containers are exposed to rainfall • Marinas (service and maintenance) • Other land uses and activities as designated by the review authority

For further information regarding the design of stormwater collection systems in Aquifer Protection Areas, contact the Aquifer Protection Area Program at (860) 424-3020 or visit www.ct.gov/deep/aquiferprotection.



General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

APPENDIX D

Coastal Management Act Determination Form

For sites within the Coastal Boundary, please attach this form and written approval from the local governing authority (or verification of exemption) to the Registration Form for the Discharge of Stormwater and Dewatering Wastewaters From Construction Activities.

SITE INFORMATION

Future Permittee _____
Mailing Address _____
Business Phone _____ ext.: _____ Fax: _____
Contact Person _____ Title: _____
Site Name _____
Site Address/ Location _____
Site Latitude and Longitude _____
Receiving Water (name, basin) _____
Project Description _____

STATEMENT OF REVIEW:

<p>The above referenced project is consistent with the goals and policies in section 22a-92 of the Connecticut General Statutes and will not cause adverse impacts to coastal resources as defined in section 22a-93(15) of the Connecticut General Statutes.</p> <p>Date of Coastal Site Plan Approval: _____</p> <p><input type="checkbox"/> Copy of written approval attached, or</p> <p><input type="checkbox"/> Verification of exemption attached</p>

APPENDIX E
(Exhibit 3 of District/DEEP Memorandum of Agreement)

Conservation Districts of Connecticut
Regional Delineations and Contact Information

Northwest Conservation District
1185 New Litchfield Street
Torrington, CT 06790
Ph: 860-626-7222
Fax: 860-626-7222
Email: ncd@conservect.org

Eastern Connecticut Conservation District
238 West Town Street
Norwich, CT 06360-2111
Ph: 860-887-4163 x 400 Fax: 860-887-4082
Email: kate.johnson.eccd@comcast.net

Connecticut River Coastal Conservation District, Inc.
deKoven House Community Center
27 Washington Street
Middletown, CT 06457
Ph: 860-346-3282 Fax: 860-346-3284
Email: ctrivercoastal@conservect.org

Southwest Conservation District
51 Mill Pond Road
Hamden, CT 06514
Ph: 203-287-8179 Fax: 203-288-5077
Email: swcd43@sbcglobal.net

North Central Conservation District
24 Hyde Avenue
Vernon, CT 06066
Ph: 860-875-3881 Fax: 860-870-8973
Email: tollandc@snet.net

NORTHWEST	SOUTHWEST	NORTH CENTRAL	CT RIVER COASTAL	EASTERN
Barkhamsted	Ansonia	Avon	Berlin	Andover
Bethel	Beacon Falls	Bloomfield	Chester	Ashford
Bethlehem	Bethany	Bolton	Clinton	Bozrah
Bridgewater	Branford	Bristol	Colchester	Brooklyn
Brookfield	Bridgeport	Burlington	Cromwell	Canterbury
Canaan	Cheshire	Canton	Deep River	Chaplin
Colebrook	Darien	Coventry	Durham	Columbia
Cornwall	Derby	East Granby	East Haddam	Eastford
Danbury	East Haven	East Hartford	East Hampton	East Lyme
Goshen	Easton	East Windsor	Essex	Franklin
Hartland	Fairfield	Ellington	Haddam	Griswold
Harwinton	Greenwich	Enfield	Hebron	Groton
Kent	Guilford	Farmington	Killingworth	Hampton
Litchfield	Hamden	Glastonbury	Lyme	Killingly
Morris	Meriden	Granby	Madison	Lebanon
New Fairfield	Middlebury	Hartford	Marlborough	Ledyard
New Hartford	Milford	Manchester	Middlefield	Lisbon
New Milford	Monroe	Plainville	Middletown	Mansfield
Newtown	Naugatuck	Simsbury	Newington	Montville
Norfolk	New Canaan	Somers	New Britain	New
North Canaan	New Haven	South Windsor	Old Lyme	London
Plymouth	North Branford	Stafford	Old Saybrook	North
Roxbury	North Haven	Suffield	Portland	Stonington
Salisbury	Norwalk	Tolland	Rocky Hill	Norwich
Sharon	Orange	Vernon	Salem	Plainfield
Sherman	Oxford	West Hartford	Westbrook	Pomfret
Southbury	Prospect	Wethersfield		Preston
Thomaston	Redding	Willington		Putnam
Torrington	Ridgefield	Windsor		Scotland
Warren	Seymour	Windsor Locks		Sprague
Washington	Shelton			Sterling
Watertown	Southington			Stonington
Winchester	Stamford			Thompson
Woodbury	Stratford			Union
	Trumbull			Voluntown
	Wallingford			Waterford
	Waterbury			Windham
	West Haven			Woodstock
	Weston			
	Westport			
	Wilton			
	Wolcott			
	Woodbridge			

APPENDIX F

Memorandum of Agreement Between The Connecticut Department of Energy & Environmental Protection and the Conservation Districts of Connecticut

WHEREAS, the Commissioner of the Department of Energy and Environmental Protection (“Department” or “DEEP”) is authorized by section 22a-6(2)(3) and (4) of the Connecticut General Statutes (“CGS”) to enter into this Agreement; and

WHEREAS, the five Conservation Districts of Connecticut (collectively, the “Districts”), are not-for-profit corporations duly authorized, organized and existing under the laws of the State of Connecticut and are authorized by section 22a-315 of the CGS and section 22a-315-14 of the Regulations of Connecticut State Agencies to enter into this Agreement; and

WHEREAS, section 22a-430b of the Connecticut General Statutes requires the Department to regulate stormwater discharges from construction activities under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (“the Construction General Permit” or “CGP”), which has been or shall be issued on October 1, 2013. The Construction General Permit requires the implementation of erosion and sedimentation controls to control the discharge of sediment from construction and post-construction discharges; and

WHEREAS, Construction General Permits require the preparation and implementation of a Stormwater Pollution Control Plan (“Plan” or “SWPCP”) to prevent erosion and the discharge of sediment to the waters of the state; and

WHEREAS, pursuant to section 22a-315 of the CGS, soil and water conservation districts and boards were established to advise the Commissioner on matters of soil and water conservation and erosion and sedimentation control and to assist the Commissioner in implementing programs related to soil and water conservation and erosion and sediment control; and

WHEREAS, pursuant to section 22a-315 of the CGS, the soil and water conservation districts and boards may receive funds from private sources for services provided to promote soil and water conservation and to assist the Commissioner in the implementation of related programs; and

WHEREAS, section 22a-326 of the CGS declares the policy of the state “to strengthen and extend its erosion and sediment control activities and programs and to establish and implement, through the Council on Soil and Water Conservation, soil and water conservation districts, the municipalities and the Commissioner of Energy and Environmental Protection, a state-wide coordinated erosion and sediment control program which shall reduce the danger from storm water runoff, minimize nonpoint sediment pollution from land being developed and conserve and protect the land, water, air and other environmental resources of the state;” and

WHEREAS, the Districts have understanding and experience in reviewing erosion and sediment control plans because of their longstanding participation in the municipal approval process, as required by section 22a-329 of the CGS; and

WHEREAS, DEEP and the Districts are jointly dedicated to protecting the waters of the state by controlling the discharge of sediment and the pollution resulting from stormwater runoff.

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter stated, the Parties agree as follows:

I. RESPONSIBILITIES OF THE CONSERVATION DISTRICTS.

For locally approvable projects, as defined in the Construction General Permit, with five (5) or more acres of soil disturbance, the appropriate District (as specified in Appendix E of the Construction General Permit, appended hereto as Exhibit 3) shall review Stormwater Pollution Control Plans submitted to the District in accordance with Section 3(b)(10) of the CGP, shall determine whether each such SWPCP is consistent with the requirements of the CGP, and shall advise the Commissioner in writing of its determination regarding the SWPCP's consistency.

A. Components of the SWPCP Review by the Districts

1. Requirements for Conducting a Review:

(a) SWPCP review shall be conducted by a District representative having one or more of the following minimum qualifications: (i) a bachelor's degree in hydrology, engineering (agricultural, civil, environmental, or chemical), landscape architecture, geology, soil science, environmental science, natural resources management, or a related field and two years of professional and field experience, or (ii) the EnviroCert International, Inc. designation as a Certified Professional in Erosion and Sediment Control, or a Certified Professional in Storm Water Quality.

(b) All SWPCP reviews undertaken by a District shall be conducted in accordance with the guidelines and procedures established by DEEP in consultation with the Districts, as further described below, and shall include at least one inspection, and no more than 3 inspections, of the project site.

(c) The District shall begin a SWPCP review upon the receipt of the all of following: the developer's request for review, two copies of the proposed SWPCP, the payment of required fee in the amount specified in Exhibit 1 and the written permission of the developer to enter onto and inspect the project site. Once the District is in receipt of all the documents and the fee as delineated above, the developer's SWPCP shall be considered submitted to the District.

2. Determinations of Consistency by the District after Review of the SWPCP and Subsequent Procedures

(a) If the District determines the developer's SWPCP is:

(i) Consistent with the requirements of the Construction General Permit, the District shall issue an affirmative determination notice to both the developer or such developer's designee and to DEEP in order to advise them of the adequacy of the SWPCP. The District shall also provide a copy of the SWPCP to DEEP if requested by the Commissioner.

(ii) Not consistent with the requirements of the Construction General Permit, the District shall provide a written notice of such inconsistency to the developer or such developer's designee; such notice shall include a list of the SWPCP's deficiencies and any appropriate explanatory comments.

(b) If the developer's SWPCP is found to be inconsistent with the CGP, the developer may revise the SWPCP (the "Revised SWPCP") to address any deficiencies noted by the District and resubmit its Revised SWPCP to the District for review.

(c) If the District receives a Revised SWPCP in accordance with subsection (b) above, the District shall perform a review of the Revised SWPCP. If the Revised SWPCP is deemed:

(i) Consistent with the requirements of the Construction General Permit, the District shall (1) issue an affirmative determination notice to both the project developer or such project developer's designee and to DEEP to advise them of the adequacy of the SWPCP and (2) provide a copy of the SWPCP to the DEEP if requested by the Commissioner; or

(ii) Not consistent with the requirements of the CGP after this review, the District shall provide a written notice of such inconsistency to the developer or such developer's designee. This notice shall include a list of all remaining SWPCP deficiencies and any explanatory comments as appropriate.

(d) In the event the District determines after review of the Revised SWPCP in accordance with subsection (c), above, that the Revised SWPCP remains inconsistent with the requirements of the Construction General Permit, and the developer resubmits its Revised SWPCP *within 180 calendar days* of the District's original determination of inconsistency, the resubmitted Revised SWPCP shall be considered a Resubmission. As such, the resubmitted Revised SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the Resubmission Fee in Exhibit 1.

(e) In the event the District determines after review of the Revised SWPCP in accordance with subsection (c), above, that the Revised SWPCP remains inconsistent with the requirements of the Construction General Permit, and the developer resubmits its Revised SWPCP *more than 180 calendar days after* the District's original determination of inconsistency, the resubmitted Revised SWPCP shall be considered a new submission. The newly submitted Revised SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the SWPCP Review Fee in Exhibit 1.

(f) Revisions to a SWPCP subsequent to the District's prior approval of developer's SWPCP

(i) In the event the developer revises a SWPCP after the District has determined that the developer's SWPCP, prior to this revision, was consistent with the requirements of the Construction General Permit, and the developer submits the revised SWPCP to the District for review *within 180 calendar days* of the District's original determination of consistency, the SWPCP shall be considered a Post-Approval Resubmission. As a Post-Approval Resubmission, the SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the Post-Approval Resubmission Fee in Exhibit 1.

(ii) In the event the developer revises a SWPCP after the District has determined that the developer's SWPCP, prior to this revision, was consistent with the requirements of the Construction General Permit, and the developer submits the revised SWPCP to the District for review *more than 180 calendar days after* the District's original determination of consistency, the SWPCP shall be considered a new submission. The newly submitted SWPCP shall be reviewed by the District in accordance with the timeframes set forth in Section I.B., and other applicable sections of this document, and the fee shall be in accordance with Section II, below, and the SWPCP Review Fee in Exhibit 1.

B. Plan Review Timeframes

1. The District shall review a new submission of a SWPCP submitted by a developer or such developer's designee and provide review comments within thirty (30) calendar days of the date of a complete submission as specified in Section I.A.1.(c).
2. If the District identifies deficiencies in the SWPCP, the District shall allow the developer or such developer's designee the opportunity to revise their SWPCP and resubmit it to the District within fifteen (15) calendar days after the date of mailing or delivery of the District's written comments to the developer or such developer's designee.
3. The District shall review any SWPCP revised in accordance with subsection I.B.2., above, and provide a written determination of the SWPCP's consistency or inconsistency within fifteen (15) calendar days after the submission of the revised SWPCP.
4. At the request of the District or the developer and with the agreement of both the District and the developer, the deadlines stated in subsections 1. – 3., above, may be extended. However, any such extensions shall be limited to no more than double the original amount of time allowed above for the relevant action.
5. Express review of a SWPCP may be requested by a developer. However, the Districts shall have complete discretion to accept or decline such request for an express review based on the District's circumstances, including, but not limited to: their existing workload, vacation schedules and staffing. If a District grants an express review, the timeframe shall be reduced to no more than one third of the timeframes noted in subsection 1. – 3., above, and the fee shall be in accordance with the Express Reviews fee in Exhibit 1.
6. In the event a District does not complete the review of the SWPCP within sixty (60) days (or within the time allowed under any authorized extension pursuant to subsection B.4, above, but in no circumstance later than 120 days) of the date the SWPCP was initially submitted to the District, and provided such delay is not the result of the developer's or such developer's designee's failure to address SWPCP deficiencies as noted in subsection B.2, above, the District shall:
 - (a) not later than three (3) days after the District's deadline, notify the DEEP that the developer shall be initiating the registration process for the Construction General Permit in accordance with section I.B of this Agreement, for completion of the SWPCP review, and;
 - (b) provide to the DEEP, upon request, the District's complete file, including supporting documentation the developer's SWPCP consistency determination, including, but not limited to, the SWPCP, any other documentation submitted to the District by or on behalf of a developer, and any analysis already performed by the District; and
 - (c) not later than seven (7) days after the District's deadline, in accordance with section I.B of this Agreement, for completion of the SWPCP review, transfer to the DEEP, up to a maximum of \$4,500, the fees that were originally submitted by the developer.

C. Inspections of the Project Site

1. Prior to the commencement of project construction and during the course of the SWPCP review process, the District shall conduct at least one inspection of the project site.
2. Once the construction of the project has begun, a District shall make at least one, but not more than three, inspection(s) of the project site to verify that the developer's SWPCP is being

implemented as approved by the District. A District shall report the results of the inspection(s) to the developer or such developer's designee and to DEEP in a manner prescribed by the Commissioner.

3. Upon notification from the developer or developer's designee, in accordance with Section 6(a)(1) of the CGP, that construction of the stormwater collection and management system is complete, the District shall conduct one inspection of the project site to verify that the post-construction stormwater management measures were completed in accordance with the approved SWPCP. The District shall report the results of this inspection to DEEP in a manner prescribed by the Commissioner.

D. Audits

The District agrees that all records pertaining to this Agreement shall be maintained for a period of not less than five (5) years. Such records shall be made available to the DEEP and to the state auditors upon request. For the purposes of this Agreement, "Records" are all working papers and such information and materials as may have been accumulated by the District in performing the Agreement, including, but not limited to, documents, data, analysis, plans, books, computations, drawings, specifications, notes, reports, records, estimates, summaries and correspondence, kept or stored in any form.

II. FEE SCHEDULE.

A. A District may assess fees for the services it renders in conjunction with its SWPCP reviews. Such fees shall be paid as follows:

1. All fees, except those described in subsection II.A.2, below, shall be submitted by the developer to the District with the developer's request for review. These fees are non refundable.
2. The fee for Post-Approval Resubmission, as designated in Exhibit 1, shall be submitted by the developer to the District upon completion of the District's review, prior to release of the determination notice, and is non refundable.

B. The Fee Schedule shall be reviewed annually by the Parties. The Fee Schedule may be adjusted as warranted, without a formal amendment to this Agreement, by mutual agreement between the Districts and the Commissioner.

III. RESPONSIBILITIES OF DEEP.

A. In accordance with the Construction General Permit requirements for SWPCP reviews by a third party, DEEP shall conduct outreach to inform the development community that a District may review SWPCPs for consistency with the requirements of the Construction General Permit. DEEP shall also inform the development community that a registration form for authorization under the Construction General Permit may only be submitted to DEEP if: the District, or other third party in accordance with Section 3(b)(11) of the CGP, determines that the SWPCP is consistent with the requirements of the CGP, or in the event the time schedule is exceeded for a District review as described in section I.B.6, above.

B. In order to institute standard SWPCP review guidelines and procedures, DEEP shall coordinate with the Districts to prepare a SWPCP checklist. The standard review guidelines and procedures established shall be consistent with the requirements of the Construction General Permit, the 2002 CT Guidelines for Soil Erosion and Sedimentation Control, and the 2004 Stormwater Quality Manual. The Commissioner shall have final approval of the review guidelines and procedures.

C. DEEP shall provide initial training regarding SWPCP requirements for District staff involved in SWPCP reviews. The frequency of subsequent training shall be determined by the Commissioner.

D. DEEP shall retain final decision making authority regarding the determination that a SWPCP is or is not consistent with the requirements of the Construction General Permit and shall oversee the permitting process for Construction General Permit coverage.

E. Once a SWPCP has been approved, DEEP shall oversee any subsequent compliance and/or enforcement matters related to a developer's adherence to the requirements of the Construction General Permit.

F. DEEP shall have the discretion to review any of the Districts' records pertaining to any aspect this Agreement.

IV. POINTS OF CONTACT.

The following shall be points of contact for this Agreement unless otherwise agreed to by all Parties, notwithstanding section VI. All notices, demands, requests, consents, approvals or other communications required or permitted to be given or which are given with respect to this Agreement (for the purpose of this section collectively called "Notices") shall be deemed to have been effected at such time as the notice is placed in the U.S. mail, first class and postage prepaid, return receipt requested, or, placed with a recognized, overnight express delivery service that provides for a return receipt. All such Notices shall be in writing and shall be addressed as follows:

A. DEEP

Director
Water Permitting & Enforcement Division
Bureau of Material Management & Compliance Assurance
Department of Energy & Environmental Protection
79 Elm St.
Hartford, CT 06106
Phone: 860-424-3018
Fax: 860-424-4074

B. Conservation District

Board Chairperson
Address & Phone of appropriate District:

Northwest Conservation District
1185 New Litchfield Street
Torrington, CT 06790
Ph: 860-626-7222
Fax: 860-626-7222
Email: ncd@conservect.org

Eastern Connecticut Conservation District
238 West Town Street
Norwich, CT 06360-2111
Ph: 860-887-4163 x 400 Fax: 860-887-4082
Email: kate.johnson.eccd@comcast.net

Connecticut River Coastal Conservation District, Inc.
deKoven House Community Center
27 Washington Street
Middletown, CT 06457
Ph: 860-346-3282 Fax 860-346-3284
Email: ctrivercoastal@conservect.org

Southwest Conservation District
51 Mill Pond Road
Hamden, CT 06514
Ph: 203-287-8179 Fax: 203-288-5077
Email: swcd43@sbcglobal.net

North Central Conservation District
24 Hyde Avenue
Vernon, CT 06066
Ph: 860-875-3881 Fax: 860-870-8973
Email: tollandc@snet.net

V. EXECUTIVE ORDERS AND ANTI-DISCRIMINATION. The Districts shall comply with the additional terms and conditions hereto attached as Exhibit 2.

VI. AMENDMENTS. Either the DEEP or the Districts may recommend revisions to this Agreement as circumstances may warrant; however, any revisions must be upon mutual agreement of DEEP and all five Conservation Districts. Unless otherwise stated in this Agreement, formal written amendment is required for changes to any of the terms and conditions specifically stated in the Agreement, including Exhibit 2 of the Agreement, any prior amendments to the Agreement, and any other Agreement revisions determined material by the Department.

VII. SEVERABILITY. The provisions of this Agreement are severable. If any part of it is found unenforceable, all other provisions shall remain fully valid and enforceable, unless the unenforceable provision is an essential element of the bargain.

VIII. SOVEREIGN IMMUNITY. The Parties acknowledge and agree that nothing in the Agreement shall be construed as a modification, compromise or waiver by the State of any rights or defenses of any immunities provided by federal law or the laws of the State of Connecticut to the State or any of the State's, which they may have had, now have or shall have with respect to all matters arising out of the Agreement. To the extent that this section conflicts with any other section, this section shall govern.

IX. FORUM AND CHOICE OF LAW. The Agreement shall be deemed to have been made in the City of Hartford, State of Connecticut. Both Parties agree that it is fair and reasonable for the validity and construction of the Agreement to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by federal law or the laws of the State of Connecticut do not bar an action against the State or the Districts, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing here constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Districts waive any objection which they may now have or shall have to the laying of venue of any Claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

X. TERMINATION. Notwithstanding any provisions in this Agreement, DEEP, through a duly

authorized employee, may terminate the Agreement whenever the Agency makes a written determination that such Termination is in the best interests of the State. The Agency shall notify the Districts in writing sent by certified mail, return receipt requested, which notice shall specify the effective date of Termination and the extent to which the Districts must complete its Performance under the Agreement prior to such date; or (b) The Districts may terminate the Agreement for good cause. The Districts shall notify DEEP by written notice at least one hundred eighty (180) days prior to the effective date of termination. In order for the Districts to terminate this Agreement, (1) there must be a consensus between all five Conservation Districts that each District shall be terminating this Agreement with the DEEP; (2) such proof of consensus shall be submitted to the DEEP in the form of a letter signed by the duly authorized agent for each District by certified mail, return receipt requested, at least one hundred eighty (180) days prior to the Districts' intention to cancel or terminate. Upon the Termination of this Agreement by either Party, the Districts shall deliver to the Agency copies of all Records no later than thirty (30) days after the Termination of the Agreement, or fifteen (15) days after the Non-terminating Party receives a written request from the Terminating Party for the Records. The Districts shall deliver those Records that exist in electronic, magnetic or other intangible form in a non-proprietary format, such as, but not limited to, PDF, ASCII or .TXT. Upon receipt of a written notice of Termination from the Agency, the Districts shall cease operations as the Agency directs in the notice, and take all actions that are necessary or appropriate, or that the Agency may reasonably direct, for the protection, and preservation of records. Except for any work which the Agency directs the Districts to Perform in the notice prior to the effective date of Termination, and except as otherwise provided in the notice, the Districts shall terminate or conclude all existing subcontracts and purchase orders and shall not enter into any further subcontracts, purchase orders or commitments. Upon Termination of the Agreement, all rights and obligations shall be null and void, so that no Party shall have any further rights or obligations to any other Party, except with respect to the sections which survive Termination. All representations, warranties, agreements and rights of the Parties under the Agreement shall survive such Termination to the extent not otherwise limited in the Agreement and without each one of them having to be specifically mentioned in the Agreement. Termination of the Agreement pursuant to this section shall not be deemed to be a breach of Agreement by the Agency.

XI. DURATION OF AGREEMENT. This Agreement shall be effective on July 1, 2013 or on the date of the last signature below, whichever is later, and shall continue in force unless canceled or terminated by either party in accordance with paragraph X above.

XII. VOID AB INITIO. Notwithstanding paragraphs X and XI, the Agreement shall be void *ab initio* if the Construction General Permit is reissued, revoked or modified to eliminate the need for the Districts to review the SWPCP pursuant to such general permit's terms and conditions or if the Construction General Permit expires and is not reissued.

XIII. INTERPRETATION. The Agreement contains numerous references to statutes and regulations. For purposes of interpretation, conflict resolution and otherwise, the content of those statutes and regulations shall govern over the content of the reference in the Agreement to those statutes and regulations.

XIV. ENTIRETY OF AGREEMENT. This Agreement is the entire agreement between the Parties with respect to its subject matter, and supersedes all prior agreements, proposals, offers, counteroffers and understandings of the Parties, whether written or oral. The Agreement has been entered into after full investigation, neither Party relying upon any statement or representation by the other unless such statement or representation is specifically embodied in the Agreement.

XV. PROTECTION OF STATE CONFIDENTIAL INFORMATION. (*mandatory language required for all PSAs effective 12/1/11*)

A. The Districts or District Parties, at their own expense, have a duty to and shall protect from a

Confidential Information Breach any and all Confidential Information which they come to possess or control, wherever and however stored or maintained, in a commercially reasonable manner in accordance with current industry standards.

B. Each District or District Party shall develop, implement and maintain a comprehensive data-security program for the protection of Confidential Information. The safeguards contained in such program shall be consistent with and comply with the safeguards for protection of Confidential Information, and information of a similar character, as set forth in all applicable federal and state law and written policy of the Department or State concerning the confidentiality of Confidential Information. Such data-security program shall include, but not be limited to, the following:

1. A security policy for employees related to the storage, access and transportation of data containing Confidential Information;
2. Reasonable restrictions on access to records containing Confidential Information, including access to any locked storage where such records are kept;
3. A process for reviewing policies and security measures at least annually;
4. Creating secure access controls to Confidential Information, including but not limited to passwords; and
5. Encrypting of Confidential Information that is stored on laptops, portable devices or being transmitted electronically.

C. The District and District Parties shall notify the Department and the Connecticut Office of the Attorney General as soon as practical, but no later than twenty-four (24) hours, after they become aware of or suspect that any Confidential Information which Parties have come to possess or control has been subject to a Confidential Information Breach. If a Confidential Information Breach has occurred, the District shall, within three (3) business days after the notification, present a credit monitoring and protection plan to the Commissioner of Administrative Services, the Department and the Connecticut Office of the Attorney General, for review and approval. Such credit monitoring or protection plan shall be made available by the District at its own cost and expense to all individuals affected by the Confidential Information Breach. Such credit monitoring or protection plan shall include, but is not limited to, reimbursement for the cost of placing and lifting one (1) security freeze per credit file pursuant to Connecticut General Statutes §36a-701a. Such credit monitoring or protection plans shall be approved by the State in accordance with this Section and shall cover a length of time commensurate with the circumstances of the Confidential Information Breach. The District's costs and expenses for the credit monitoring and protection plan shall not be recoverable from the Department, any State of Connecticut entity or any affected individuals.

D. The District shall incorporate the requirements of this Section in all subAgreements requiring each District Party to safeguard Confidential Information in the same manner as provided for in this Section.

E. Nothing in this Section shall supersede in any manner the District's and/ or the District Parties' obligations pursuant to HIPAA or the provisions of this Agreement concerning the obligations of the District as a Business Associate of the Department.

XVI. AMERICANS WITH DISABILITIES ACT (*Mandatory*). The Districts shall be and remain in compliance with the Americans with Disabilities Act of 1990 ("Act"), to the extent applicable, during the term of the Agreement. The DEEP may cancel the Agreement if the District and District Parties fail to comply with the Act.

XVII. ADA PUBLICATION STATEMENT. The following statement shall be incorporated into all **publications** prepared under the terms of this Agreement:

“The Department of Energy and Environmental Protection is an affirmative action/equal opportunity employer and service provider. In conformance with the Americans with Disabilities Act, DEEP makes every effort to provide equally effective services for persons with disabilities. Individuals with disabilities who need this information in an alternative format, to allow them to benefit and/or participate in the agency’s programs and services, should call DEEP’s Human Resources Office at (860) 424-3006, send a fax to (860) 424-3896, or email DEEP.MedRecs@ct.gov. Persons who are hearing impaired should call the State of Connecticut relay number 711.”

When advertising any **public meetings** conducted under the terms of this Agreement, the above publications language should be used as well as the following statement:

“Requests for accommodations must be made at least two weeks prior to the program date.”

All **videos** produced under the terms of this Agreement must be made available with closed captioning.

XVIII. PUBLICATION OF MATERIALS. The District must obtain written approval from the State of Connecticut prior to distribution or publication of any printed material prepared under the terms of this Agreement. Unless specifically authorized in writing by the State, on a case by case basis, the District shall have no right to use, and shall not use, the name of the State of Connecticut, its officials, agencies, or employees or the seal of the State of Connecticut or its agencies: (1) in any advertising, publicity, promotion; or (2) to express or to imply any endorsement of District’s products or services; or (3) to use the name of the State of Connecticut, its officials agencies, or employees or the seal of the State of Connecticut or its agencies in any other manner (whether or not similar to uses prohibited by (1) and (2) above), except only to manufacture and deliver in accordance with this Agreement such items as are hereby contracted for by the State. In no event may the Districts use the State Seal in any way without the express written consent of the Secretary of State.

XIX. CHANGES IN PRINCIPAL PROJECT STAFF. Any changes in the principal project staff must be requested in writing and approved in writing by the Commissioner at the Commissioner’s sole discretion. In the event of any unapproved change in principal project staff, the Commissioner may, in the Commissioner’s sole discretion, terminate this Agreement.

XX. FURTHER ASSURANCES. The Parties shall provide such information, execute and deliver any instruments and documents and take such other actions as may be necessary or reasonably requested by the other Party which are not inconsistent with the provisions of this Agreement and which do not involve the vesting of rights or assumption of obligations other than those provided for in the Agreement, in order to give full effect to the Agreement and to carry out the intent of the Agreement.

XXI. ASSIGNMENT. The Districts shall not assign any of their rights or obligations under the Agreement, voluntarily or otherwise, in any manner without the prior written consent of the Agency. The Agency may void any purported assignment in violation of this section and declare the District in breach of this Agreement. Any termination by the Agency for a breach is without prejudice to the Agency’s or the State’s rights or possible Claims.

XXII. EXHIBITS. All exhibits referred to in, and attached to, this Agreement are incorporated in this Agreement by such reference and shall be deemed to be a part of it as if they had been fully set forth in it.

XXIII. FORCE MAJEUR. Events that materially affect the cost of the Goods or Services or the time schedule within which to Perform and are outside the control of the party asserting that such an event has

occurred, including, but not limited to, labor troubles unrelated to District(s), failure of or inadequate permanent power, unavoidable casualties, fire not caused by a District, extraordinary weather conditions, disasters, riots, acts of God, insurrection or war.

XXIV. INDEMNIFICATION. The Districts shall indemnify, defend and hold harmless the State and its officers, representatives, agents, servants, employees, successors and assigns from and against any and all (1) Claims arising, directly or indirectly, in connection with the Agreement, including the acts of commission or omission (collectively, the "Acts") of the District or District Parties; and (2) liabilities, damages, losses, costs and expenses, including but not limited to, attorneys' and other professionals' fees, arising, directly or indirectly, in connection with Claims, Acts or the Agreement. The Districts obligations under this section to indemnify, defend and hold harmless against Claims includes Claims concerning confidentiality of any part of or all of the Districts' Records, any intellectual property rights, other proprietary rights of any person or entity, copyrighted or uncopyrighted compositions, secret processes, patented or unpatented inventions, articles or appliances furnished or used in the Performance. The Districts shall not be responsible for indemnifying or holding the State harmless from any liability arising due to the negligence of the State or any other person or entity acting under the direct control or supervision of the State. The Districts shall reimburse the State for any and all damages to the real or personal property of the State caused by the Acts of the Districts or any District Parties. The State shall give the Districts reasonable notice of any such Claims. The Districts shall carry and maintain at all times during the term of the Agreement, and during the time that any provisions survive the term of the Agreement, sufficient general liability insurance to satisfy its obligations under this Agreement. The Districts shall name the State as an additional insured on the policy and shall provide a copy of the policy to the Agency prior to the effective date of the Agreement. The Districts shall not begin Performance until the delivery of the policy to the Agency. The Agency shall be entitled to recover under the insurance policy even if a body of competent jurisdiction determines that the Agency or the State is contributorily negligent. This section shall survive the Termination of the Agreement and shall not be limited by reason of any insurance coverage.

XXV. DISTRICT PARTIES. A District's members, directors, officers, shareholders, partners, managers, principal officers, representatives, agents, servants, consultants, employees or any one of them or any other person or entity with whom the District is in privity of oral or written contract and the District intends for such other person or entity to Perform under the Agreement in any capacity

XXVI. CAMPAIGN CONTRIBUTION RESTRICTION. For all State contracts as defined in P.A. 07-1 having a value in a calendar year of \$50,000 or more or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See SEEC Form 11.

Authorizing Signatures

For DEEP: [Signature] 8/21/13
Commissioner Date

For Northwest Conservation District: [Signature] 6/5/13
Signature Date

Chairman
Title

For Eastern Connecticut Conservation District: [Signature] 6/12/13
Signature Date

Chair
Title

For Connecticut River Coastal Conservation District, Inc.: [Signature] 5/22/13
Signature Date

Chair
Title

For Southwest Conservation District: [Signature] 5/13/13
Signature Date

Vice-chairperson SWCD
Title

For North Central Conservation District: [Signature] 5/23/13
Signature Date

Chairman
Title

EXHIBIT 1

**Connecticut Conservation District
Stormwater Pollution Control Plan Review Fee Schedule**

Single Family Residential Developments Disturbing 5 or more Acres

Number of Lots	Standard Fee	Number of Lots	Standard Fee
1	\$1,500	26	\$5,625
2	\$1,665	27	\$5,790
3	\$1,830	28	\$5,955
4	\$1,995	29	\$6,120
5	\$2,160	30	\$6,285
6	\$2,325	31	\$6,450
7	\$2,490	32	\$6,615
8	\$2,655	33	\$6,780
9	\$2,820	34	\$6,945
10	\$2,985	35	\$7,110
11	\$3,150	36	\$7,275
12	\$3,315	37	\$7,440
13	\$3,480	38	\$7,605
14	\$3,645	39	\$7,770
15	\$3,810	40	\$7,935
16	\$3,975	41	\$8,100
17	\$4,140	42	\$8,265
18	\$4,305	43	\$8,430
19	\$4,470	44	\$8,595
20	\$4,635	45	\$8,760
21	\$4,800	46	\$8,925
22	\$4,965	47	\$9,090
23	\$5,130	48	\$9,255
24	\$5,295	49	\$9,420
25	\$5,460	50	\$9,585

Over 50 lots:
\$9,585 + \$20 x number of lots over 50

SW PCP Review: Standard Fee (as shown above)

Resubmission: Standard Fee minus 50%

Post-Approval Resubmission: \$85 per hour, up to a maximum of the Standard Fee minus 50%

Express Reviews: The specified fee for an SW PCP Review, a Resubmission, or a Post-Approval Resubmission; plus 50% of the applicable fee and/or limit

Policies:

1. Payment due upon submission of SW PCP, with the exception of Post-Approval Resubmissions.
2. Payment for Post-Approval Resubmission review is due upon completion of review.
3. Written permission to enter onto and inspect the site: Due upon submission of SW PCP.

EXHIBIT 1

**Connecticut Conservation District
Stormwater Pollution Control Plan Review Fee Schedule**

Commercial and Multi Family Developments

Number of Disturbed Standard Acres Fee		Number of Disturbed Standard Acres Fee	
5	\$2,200	28	\$5,995
6	\$2,365	29	\$6,160
7	\$2,530	30	\$6,325
8	\$2,695	31	\$6,490
9	\$2,860	32	\$6,655
10	\$3,025	33	\$6,820
11	\$3,190	34	\$6,985
12	\$3,355	35	\$7,150
13	\$3,520	36	\$7,315
14	\$3,685	37	\$7,480
15	\$3,850	38	\$7,645
16	\$4,015	39	\$7,810
17	\$4,180	40	\$7,975
18	\$4,345	41	\$8,140
19	\$4,510	42	\$8,305
20	\$4,675	43	\$8,470
21	\$4,840	44	\$8,635
22	\$5,005	45	\$8,800
23	\$5,170	46	\$8,965
24	\$5,335	47	\$9,130
25	\$5,500	48	\$9,295
26	\$5,665	49	\$9,460
27	\$5,830	50	\$9,625

Over 50 acres:

\$9,625 + \$25 x number of disturbed acres over 50

SW PCP Review: Standard Fee (as shown above)

Resubmission: Standard Fee minus 50%

Post-Approval Resubmission: \$85 per hour, up to a maximum of the Standard Fee minus 50%

Express Reviews: The specified fee for an SW PCP Review, a Resubmission, or a Post-Approval Resubmission; plus 50% of the applicable fee and/or limit

Policies:

1. Payment due upon submission of SW PCP, with the exception of Post-Approval Resubmissions.
2. Payment for Post-Approval Resubmission review is due upon completion of review.
3. Written permission to enter onto and inspect the site: Due upon submission of SW PCP.

EXHIBIT 2

EXECUTIVE ORDERS

The Agreement is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the Contract as if they had been fully set forth in it. At the Districts' request, the Client Agency shall provide a copy of these orders to the Districts. The Agreement may also be subject to Executive Order No. 7C of Governor M. Jodi Rell, promulgated July 13, 2006, concerning contracting reforms and Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services, in accordance with their respective terms and conditions.

NONDISCRIMINATION

(a) For purposes of this Section, the following terms are defined as follows:

- i. "Commission" means the Commission on Human Rights and Opportunities;
- ii. "Contract" and "contract" include any extension or modification of this Agreement or contract;
- iii. "Districts" and "districts" include the Districts and any successors or assigns of the Districts or districts;
- iv. "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose.
- v. "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;
- vi. "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
- vii. "marital status" means being single, married as recognized by the State of Connecticut, widowed, separated or divorced;
- viii. "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;
- ix. "minority business enterprise" means any small contractor, District or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of Connecticut General Statutes § 32-9n; and
- x. "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each District is (1) a political subdivision of the state, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in Conn. Gen. Stat. Section 1-120, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in Conn. Gen. Stat. Section 1-267, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

(b) (1) The Districts agree and warrant that in the performance of the Agreement such Districts will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Districts that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Districts further agree to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Districts that such disability prevents performance of the work involved; (2) the Districts agree, in all solicitations or advertisements for employees placed by or on behalf of the Districts, to state that it is

an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Districts agree to provide each labor union or representative of workers with which the Districts have a collective bargaining Agreement or other contract or understanding and each vendor with which the Districts have a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Districts' commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Districts agree to comply with each provision of this Section and Connecticut General Statutes §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes §§ 46a-56, 46a-68e and 46a-68f; and (5) the Districts agree to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Districts as relate to the provisions of this Section and Connecticut General Statutes § 46a-56. If the contract is a public works contract, the Districts agree and warrant that they will make good faith efforts to employ minority business enterprises as Districts and suppliers of materials on such public works projects.

(c) Determination of the Districts' good faith efforts shall include, but shall not be limited to, the following factors: The Districts' employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

(d) The Districts shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.

(e) The Districts shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on the Districts, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Districts shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes §46a-56; provided if such Districts become involved in, or is threatened with, litigation with the Districts or vendor as a result of such direction by the Commission, the Districts may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

(f) The Districts agree to comply with the regulations referred to in this Section as they exist on the date of this Agreement and as they may be adopted or amended from time to time during the term of this Agreement and any amendments thereto.

(g) (1) The Districts agree and warrant that in the performance of the Agreement such Districts will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Districts agree to provide each labor union or representative of workers with which such Districts have a collective bargaining Agreement or other contract or understanding and each vendor with which such Districts have a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Districts' commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Districts agree to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Districts agree to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Districts which relate to the provisions of this Section and Connecticut General Statutes § 46a-56.

(h) The Districts shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on the Districts, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Districts shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Districts become involved in, or is threatened with, litigation with the Districts or vendor as a result of such direction by the Commission, the Districts may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to the Connecticut Department of Energy and Environmental Protection (DEEP)."

Note: Place on official Letterhead. Need to document registered name with CT Secretary of State C.O.N.C.O.R.D.

CERTIFICATION

I, **XXXXXXXXXXXXXXXXXX**, Chair of the **XXXXXXXXXXXXXXXXXX** an entity lawfully organized and existing under the laws of Connecticut, do hereby certify that the following is a true and correct copy of a resolution adopted on the **>>>>**day of **>>>>**, 2011, by the governing body of the **XXXXXX** in accordance with all of its documents of governance and management and the laws of Connecticut and further certify that such resolution has not been modified, rescinded or revoked, and is a present in full force and effect.

RESOLVED: That the **XXXXXXXXXXXXXXXXXX** hereby adopts as its policy to support the nondiscrimination agreements and warranties required under Conn. Gen. Stat. § 4a-60(a)(1) and § 4a-60a(a)(1), as amended in State of Connecticut Public Act 07-245 and sections 9(a)(1) and 10(a)(1) of Public Act 07-142, as those statutes may be amended from time to time.

IN WITNESS WHEREOF, the undersigned has executed this certificate **this >>>>day of >>>>**, **2013**.

Signature

Date

CONSERVATION DISTRICT PLAN REVIEW CERTIFICATION

Registrations submitted to DEEP for which a Conservation District has performed the Plan review pursuant to Section 3(b)(10) of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities shall include the following certification:

"I hereby certify that I am an employee of the [INSERT NAME OF DISTRICT] Conservation District and that I meet the qualifications to review Stormwater Pollution Control Plans as specified in the Memorandum of Agreement between the Connecticut Department of Energy & Environmental Protection and the Connecticut Conservation Districts. I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of the requirements of such general permit and on the standard of care for such projects, that the Plan is in compliance with the requirements of the general permit. I understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

Registrations submitted to DEEP for which the District review was begun but ***could not be completed*** within the time limits specified in the Memorandum of Agreement shall include the following statement:

"I hereby certify that I am an employee of the [INSERT NAME OF DISTRICT] Conservation District and that I meet the qualifications to review Stormwater Pollution Control Plans as specified in the Memorandum of Agreement between the Connecticut Department of Energy & Environmental Protection and the Connecticut Conservation Districts. I am making this statement in connection with a registration under the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I hereby state that the review of the Stormwater Pollution Control Plan (Plan) for such registration was not completed within the time frames specified in the Memorandum of Agreement. Consequently, I cannot certify that the Plan is in compliance with the requirements of the general permit."



General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities

APPENDIX G

Historic Preservation Review

Pursuant to Chapter 184a, Section 10-387 of the Connecticut General Statutes, the Department of Energy & Environmental Protection (DEEP) shall review, in consultation with the Connecticut Commission on Culture and Tourism, its policies and practices for consistency with the preservation and study of CT's archaeological and historical sites. Pursuant to this requirement, DEEP has outlined the following process for assessing the potential for and the presence of historic and/or archaeological resources at a proposed development site. DEEP advises a review for the resources identified below *be initiated up to one year* prior to registration for this permit (*or prior to property purchase if possible*) and in conjunction with the local project approval process. However, a review conducted for an Army Corps of Engineers Section 404 wetland permit would meet this requirement.

Step 1: Determine if the proposed site is within an area of significance by consulting the following resources:

1. CT Register of Historic Places found at the link below:
<http://www.nationalregisterofhistoricplaces.com/CT/state.html#pickem>
2. The municipality of the proposed development site for its designations of local historic districts, including but not limited to, local Historic District and/or Property Statutes.

Step 2: Assess site characteristics to determine the presence of a potential archaeological site, sacred site, and/ or sacred object as described below:

Definitions:

1. "Archaeological site" means a location where there exists material evidence that is not less than fifty years old of the past life and culture of human beings in the state.
2. "Sacred site" or "sacred land" means any space, including an archaeological site, of ritual or traditional significance in the culture and religion of Native Americans that is listed or eligible for listing on the National Register of Historic Places (16 USC 470a, as amended) or the state register of historic places defined in section 10-410, including, but not limited to, marked and unmarked human burials, burial areas and cemeteries, monumental geological or natural features with sacred meaning or a meaning central to a group's oral traditions; sites of ceremonial structures, including sweat lodges; rock art sites, and sites of great historical significance to a tribe native to this state.
3. "Sacred object" means any archaeological artifact or other object associated with a sacred site.

Site Prescreening Criteria:

1. Does the proposed development site include lands within 300 feet of surface water features, such as streams, brooks, lakes, or marshes?

If "yes", proceed to Criterion 2. If the answer to Criterion 1 is "no", then there is a low potential for prehistoric period archaeological resources - Proceed to Criterion 3.

2. Does the area of anticipated construction or ground disturbance include soils classified by the Natural Resource Conservation Service as "Sandy Loam/ Loamy sand" or "Sandy Gravel Loam" not including "Fine Sandy Loam/ Loamy sand" with slopes less than or equal to 15%? (Soil mapping information is available for free from:
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>)

If the answer to Criterion 2 is no, then there is a low potential for prehistoric period archaeological resources - Proceed to Criterion 3. If yes, the project site may contain significant prehistoric period archaeological resources

– assess all other criteria and proceed to Step 3.

3. Are there buildings or structures over 150 years in age with the project site?

If no, proceed to Criterion 4. If yes, the project site may contain significant historic period archaeological resources – assess all other criteria and proceed to Step 3.

4. Are there buildings or structures shown within or immediately adjacent to the project site on the 1850's Connecticut County maps?

Historic County maps are here:

Fairfield - <http://www.flickr.com/photos/uconnlibrariesmagic/3387034755/>

Hartford - <http://www.flickr.com/photos/uconnlibrariesmagic/3386955421/>

Litchfield - <http://www.flickr.com/photos/uconnlibrariesmagic/3387765290/>

Middlesex - <http://www.flickr.com/photos/uconnlibrariesmagic/3386956185/>

New Haven - <http://www.flickr.com/photos/uconnlibrariesmagic/3386956345/>

New London - <http://www.flickr.com/photos/uconnlibrariesmagic/3387766080/>

Tolland - <http://www.flickr.com/photos/uconnlibrariesmagic/3386957013/>

Windham - <http://www.flickr.com/photos/uconnlibrariesmagic/3387766950/>

To look for buildings and structures click on the appropriate county map link. From the “Actions” drop-down menu choose “View all sizes”. On the “Photo/All sizes” page, choose “Original” to view the county map at an enlarged scale.

If no, there is a low potential for significant historic period archaeological resources. If yes, the site may contain significant historic period archaeological resources- assess all other criteria and proceed to Step 3.

Step 3: If you answered yes to Criterion 2, 3, or 4, please contact Daniel Forrest (860-256-2761 or daniel.forrest@ct.gov) or the current environmental review coordinator at the State Historic Preservation Office, Department of Economic and Community Development for additional guidance.

Step 4: Report in the Registration Form for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities that a review has been conducted and the results of the review (i.e. the proposed site does not have the potential for historic/ archaeological resources, or that such potential exists and is being or has been reviewed by the Connecticut Commission on Culture and Tourism).

Please note that DEEP will refer all proposed sites with a historic/ archaeological resource potential (as identified in Steps 1 & 2 above) to the State Historic Preservation Office at the Department of Economic and Community Development..

Appendix H

Wild & Scenic Rivers Guidance

Overview: Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act (WSRA) charges administration of rivers in the National Wild and Scenic Rivers System (National System) to four federal land management agencies (Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service). However, to protect and enhance river values as directed in the WSRA, it is essential to use the authorities of a number of other federal agencies in administering the water column, river bed/bank, and upland river corridor.

Congress declared a policy to protect selected rivers in the nation through the WSRA. The river-administering agencies are to protect the river's identified values, free-flowing condition, and associated water quality. Specifically, each component is to be "administered in such manner as to protect and enhance the (outstandingly remarkable) values (**ORVs**) which caused it to be included in said system. . . ."

The WSRA also directs other federal agencies to protect river values. It explicitly recognizes the Federal Energy Regulatory Commission, Environmental Protection Agency, Army Corps of Engineers and any other federal department or agency with lands on or adjacent to designated (or congressionally authorized study) rivers or that permit or assist in the construction of water resources projects.

Pertinent Sections of the Wild and Scenic Rivers Act

The full Wild and Scenic Rivers Act can be found at the website: www.rivers.gov

Pertinent Sections related to the mandate to protect river values through coordinated federal actions is found in several sections of the WSRA:

Section 1(b)	Section 7(a)	Section 10(a)
Section 12(a)	Section 12(c)	

Designated Rivers under the Wild and Scenic Rivers Act and Contact Information

The full listing of designated rivers can be found on the website www.rivers.gov

As of the date of this publication, there are two designated rivers in Connecticut, both of which are managed under the Partnership Wild and Scenic Rivers Program, through a Coordinating Committee consisting of representatives from local communities and organizations, state government and the National Park Service. More information about these rivers, their watersheds, approved management plans, the Wild and Scenic Coordinating Committees and specific contact information can be found on the websites.

1. West Branch of the Farmington River: www.farmingtonriver.org
2. Eightmile River: www.eightmileriver.org

Appendix B

Identification of Contractor and Certification Statements



**THE UNITED ILLUMINATING COMPANY
MILVON-DEVON**

GENERAL CONTRACTOR

“I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a contractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site.”

Signed: _____

Date: _____

Printed Name: _____

Telephone: _____

Title: _____

Firm: _____

Address: _____

**THE UNITED ILLUMINATING COMPANY
MILVON-DEVON**

SUBCONTRACTOR

“I certify under penalty of law that I have read and understand the terms and conditions of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. I understand that as a subcontractor at the site, I am authorized by this general permit, and must comply with the terms and conditions of this general permit, including, but not limited to, the requirements of the Stormwater Pollution Control Plan prepared for the site.”

Signed: _____

Date: _____

Printed Name: _____

Telephone: _____

Title: _____

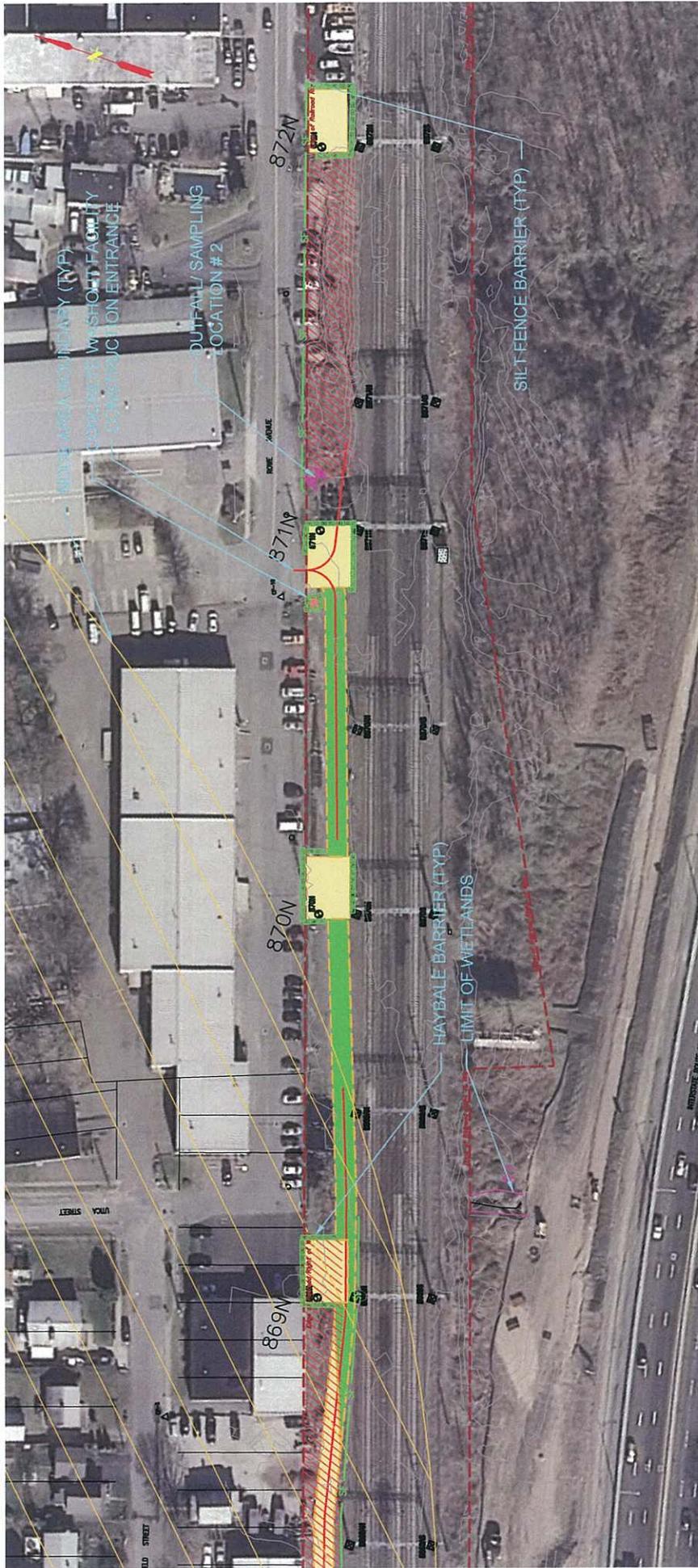
Firm: _____

Address: _____

Appendix C

Construction Drawings



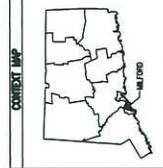


LEGEND

-  SF PROPOSED SILT FENCE
-  PROPOSED HAYBALE BARRIER
-  PROPOSED CONCRETE WASHOUT
-  PROPOSED DUTFALL / SAMPLING LOCATION

MAP REFERENCE

"MILVON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14219-0802; CREATED BY BLACK & VEATCH; DATED 4/7/2014



SCALE	1"=50'
HORIZONTAL	1"=50'
VERTICAL	1"=10'
GRAPHIC SCALE	



THE UNITED ILLUMINATING COMPANY
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILVON-DEVON RAILROAD
 MILFORD CONNECTICUT

PROJ. NO.: 20130928-010
 DATE: AUGUST 2014
 CE-0802

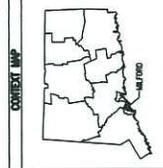
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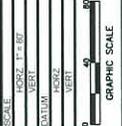


LEGEND

-  SF PROPOSED SILT FENCE
-  PROPOSED HAYBALE BARRIER
-  PROPOSED CONCRETE WASHOUT
-  PROPOSED OUTFALL / SAMPLING LOCATION

MAP REFERENCE
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SCALE	1"=50'
HORIZONTAL	1"=50'
VERTICAL	1"=10'
GRAPHIC SCALE	



THE UNITED ILLUMINATING COMPANY
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILVON-DEVON RAILROAD
 MILFORD CONNECTICUT

PROJECT No. 10150092.B10
 DATE: AUGUST 2014
CE-0803

NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER

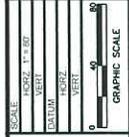
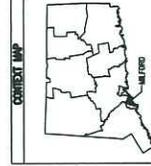


LEGEND

- SF  PROPOSED SILT FENCE
-  PROPOSED HAYBALE BARRIER
-  PROPOSED CONCRETE WASHOUT
-  PROPOSED OUTFALL / SAMPLING LOCATION

MAP REFERENCE

"MILYON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14219-0805; CREATED BY BLACK & VEATCH; DATED 4/7/2014



NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER



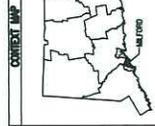
THE UNITED ILLUMINATING COMPANY
EROSION AND SEDIMENTATION CONTROL PLAN
MILYON-DEVON RAILROAD
MILFORD
CONNECTICUT

PROJECT NO. 14219-0805
DATE: AUGUST 2014
CE-0805



LEGEND

- SF PROPOSED SILT FENCE
- PROPOSED HAYBALE BARRIER
- PROPOSED CONCRETE WASHOUT
- PROPOSED OUTFALL / SAMPLING LOCATION



MAP REFERENCE

"MILYON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14219-0806; CREATED BY BLACK & VEATCH; DATED 4/7/2014

SCALE	1"=50'
VERTICAL	1"=10'
HORIZONTAL	1"=50'
GRAPHIC SCALE	0 50 100



NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER



THE UNITED ILLUMINATING COMPANY
 MILFORD
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILYON-DEVON RAILROAD
 CONNECTICUT

PROJ. NO. 14219-0806.RD
 DATE: AUGUST 2014
CE-0806



LEGEND

-  SF PROPOSED SILT FENCE
-  PROPOSED HAYBALE BARRIER
-  PROPOSED CONCRETE WASHOUT
-  PROPOSED OUTFALL / SAMPLING LOCATION

MAP REFERENCE

"MILVON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14219-0807; CREATED BY BLACK & VEATCH; DATED 4/7/2014

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VERT	1"=10'
HORIZ	1"=50'
VERT	1"=10'
GRAPHIC SCALE	

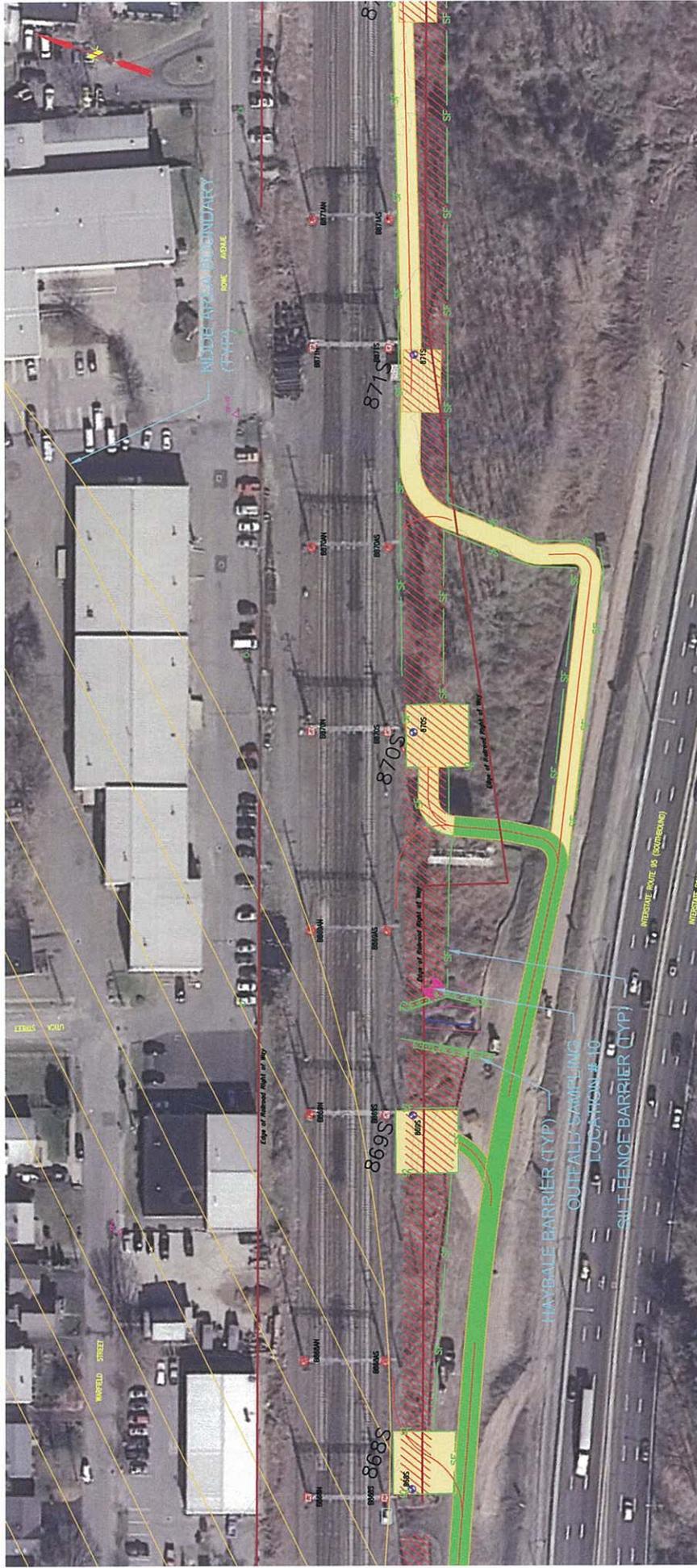


NO.	DATE	DESCRIPTION	DESIGNER	REVISION



THE UNITED ILLUMINATING COMPANY
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILFORD
 MILVON-DEVON RAILROAD
 CONNECTICUT

PROJ. NO. 10150003.010
 DATE: AUGUST 2014
CE-0807

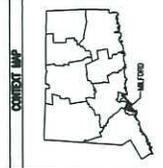


LEGEND

- SF PROPOSED SILT FENCE
- PROPOSED HAYBALE BARRIER
- PROPOSED CONCRETE WASHOUT
- PROPOSED OUTFALL / SAMPLING LOCATION

MAP REFERENCE

"MILYON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14220-0802; CREATED BY VEATCH; DATED 4/7/2014



SCALE	1"=50'
VERT	1"=5'
HORIZ	1"=50'
VERT	1"=5'
HORIZ	1"=50'
GRAPHIC SCALE	0 50 100 FEET



NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER



THE UNITED ILLUMINATING COMPANY
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILYON-DEVON RAILROAD
 MILFORD CONNECTICUT

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 DATE AUGUST 2012
CE-0809

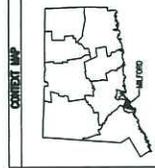


LEGEND

- SF PROPOSED SILT FENCE
- [Hatched Box] PROPOSED HAYBALE BARRIER
- [Green Box] PROPOSED CONCRETE WASHOUT
- [Red Circle] PROPOSED OUTFALL / SAMPLING LOCATION

MAP REFERENCE

"MILYON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14220-0803; CREATED BY BLACK & VEATCH; DATED 4/7/2014



NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER

FUSS & O'NEILL
THE UNITED ILLUMINATING COMPANY
333 FIFTH AVENUE, SUITE 1000
MILFORD, CT 06460

THE UNITED ILLUMINATING COMPANY
EROSION AND SEDIMENTATION CONTROL PLAN
MILYON-DEVON RAILROAD
MILFORD
CONNECTICUT

PROJECT NO. 20130263.FED
DATE: AUGUST 2014
CE-0810

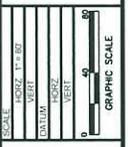


LEGEND

- SF PROPOSED SILT FENCE
- PROPOSED HAYBALE BARRIER
- PROPOSED CONCRETE WASHOUT
- PROPOSED OUTFALL / SAMPLING LOCATION

MAP REFERENCE

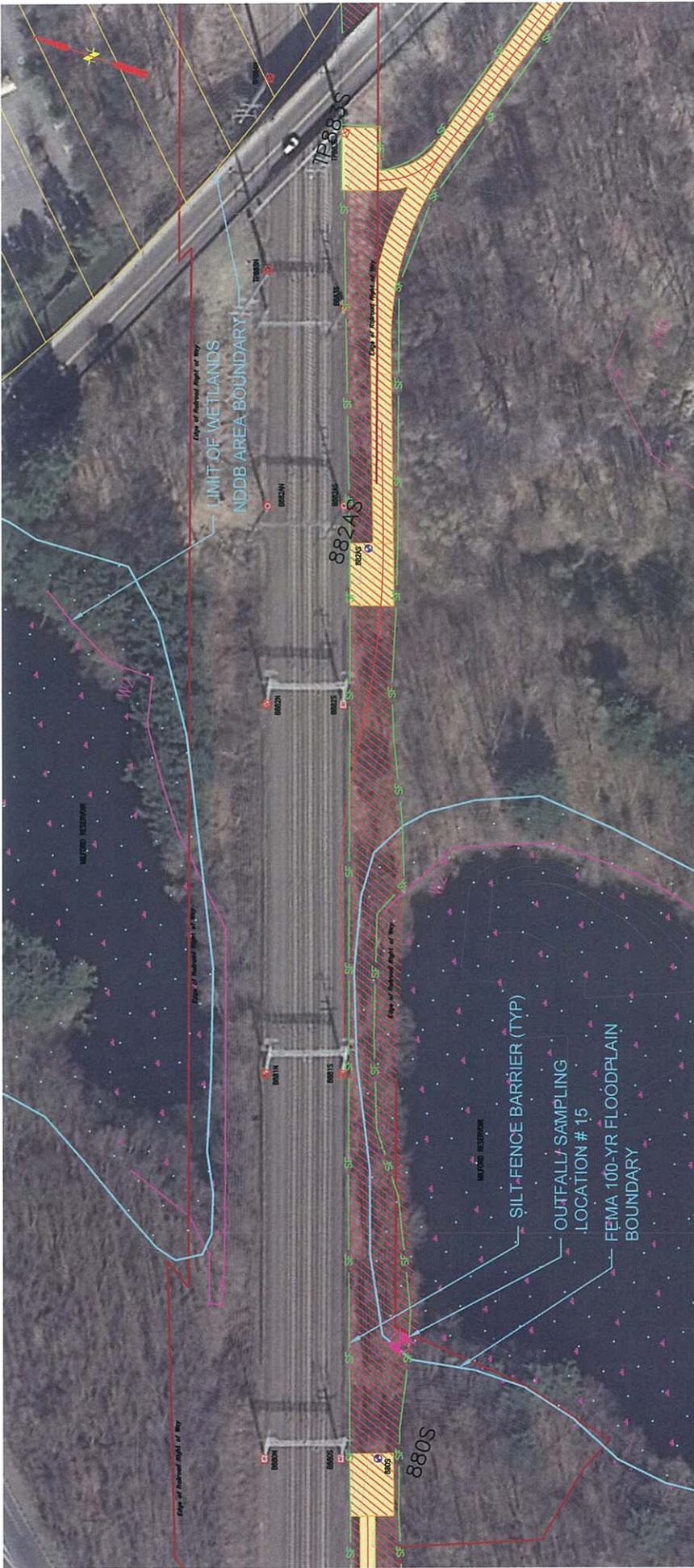
"MILYON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14220-0805; CREATED BY BLACK & VEATCH; DATED 4/7/2014



THE UNITED ILLUMINATING COMPANY
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILYON-DEVON RAILROAD
 MILFORD
 CONNECTICUT

PROJECT No. 20140803.000
 DATE: AUGUST 2014
CE-0812

NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER



LEGEND

- SF PROPOSED SILT FENCE
- PROPOSED HAYBALE BARRIER
- PROPOSED CONCRETE WASHOUT
- PROPOSED OUTFALL / SAMPLING LOCATION



MAP REFERENCE

"MILYON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14220-0806; CREATED BY BLACK & VEATCH; DATED 4/7/2014



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VERT.	1" = 20'
GRAPHIC SCALE	0 50 100

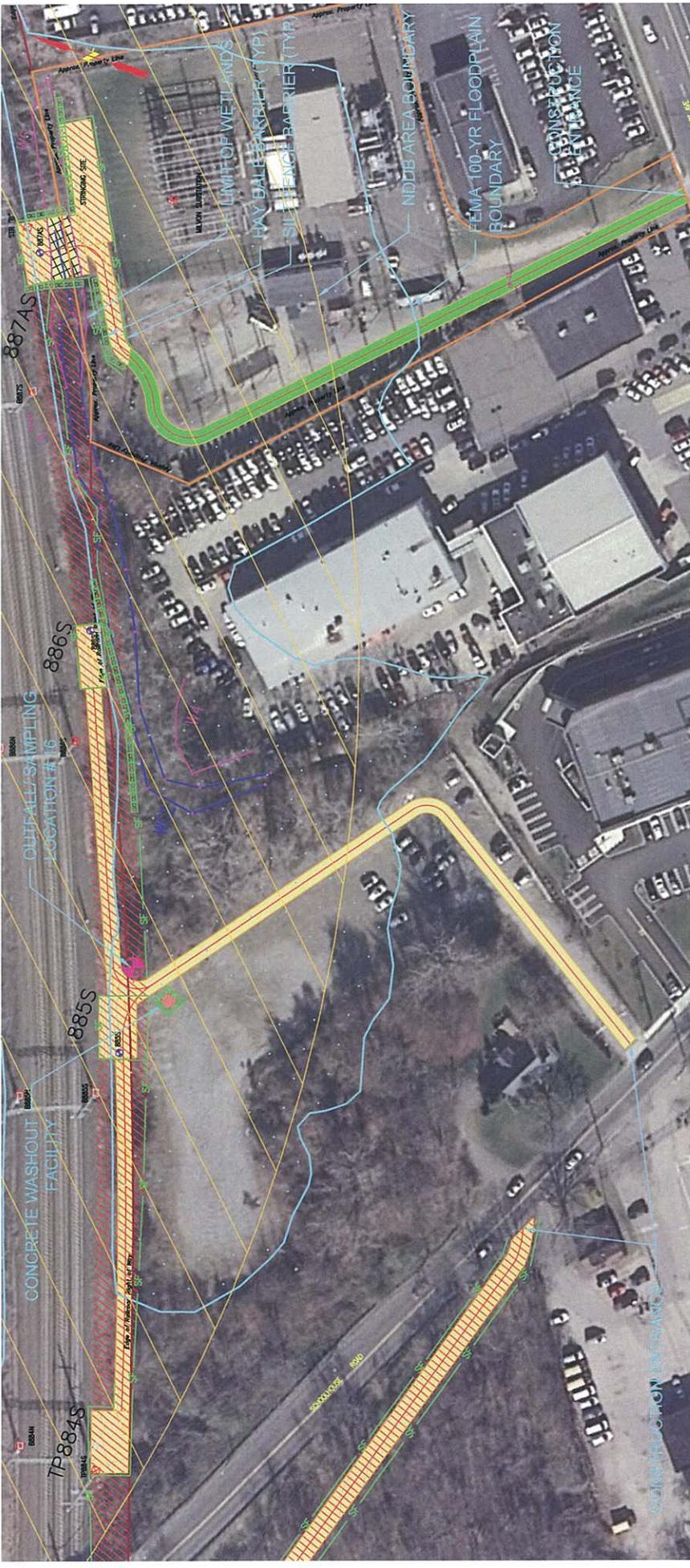


NO.	DATE	DESCRIPTION	DESIGNED	REVIEWER

FUSS & O'NEILL
 ENGINEERS ARCHITECTS
 205 WATER STREET
 MILFORD, CT 06460
 www.fussandoneill.com

THE UNITED ILLUMINATING COMPANY
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILYON-DEVON RAILROAD
 MILFORD CONNECTICUT

PROJECT NO. 20130922-BND
 DATE: AUGUST 2014
CE-0813

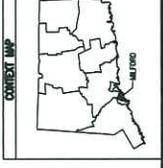


LEGEND

- SF PROPOSED SILT FENCE
- PROPOSED HAYBALE BARRIER
- PROPOSED CONCRETE WASHOUT
- PROPOSED OUTFALL / SAMPLING LOCATION

MAP REFERENCE

"MILYON-DEVON TIE 115KV TRANSMISSION LINE GENERAL ACCESS PLAN"; DRAWING NO. 14220-0807; CREATED BY BLACK & VEATCH; DATED 4/7/2014



SCALE	1"=20'
VERT	1"=10'
DATUM	NA83
VERT	NA83
GRAPHIC SCALE	



THE UNITED ILLUMINATING COMPANY
 EROSION AND SEDIMENTATION CONTROL PLAN
 MILYON-DEVON RAILROAD
 MILFORD, CONNECTICUT

PROJECT NO. 14220-0807
 DATE: AUGUST 2014
CE-0814

NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER

Appendix D

Wetland Identification and Delineation Report





Architecture
Engineering
Environmental
Land Surveying

Wetland Identification and Delineation Report

NERC Compliance

Milford, CT

BL Project No.: 13S1999

Prepared for

Black and Veatch Corporation
11401 Lamar Avenue
Overland Park, KS

Prepared by

BL Companies, Inc.
355 Research Parkway
Meriden, CT 06450

Revised April 15, 2014

Wetland Identification and Delineation Report

NERC Compliance
Milford, CT

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I. INTRODUCTION

BL Companies, Inc. (BL) conducted a site investigation to delineate state and federal wetlands and Waters of the United States. The project sites are located in the Towns of Milford, Stratford and West Haven, Connecticut (Figures 1, 2, 3 and 4). The project includes 13 areas within the vicinity of the Metro North Railway system and associated wetlands in the vicinity of the right-of-way (hereinafter referred to as the "Site").

The purpose of this report is to document and describe state, and federal jurisdictional wetlands, i.e. Waters of the United States.

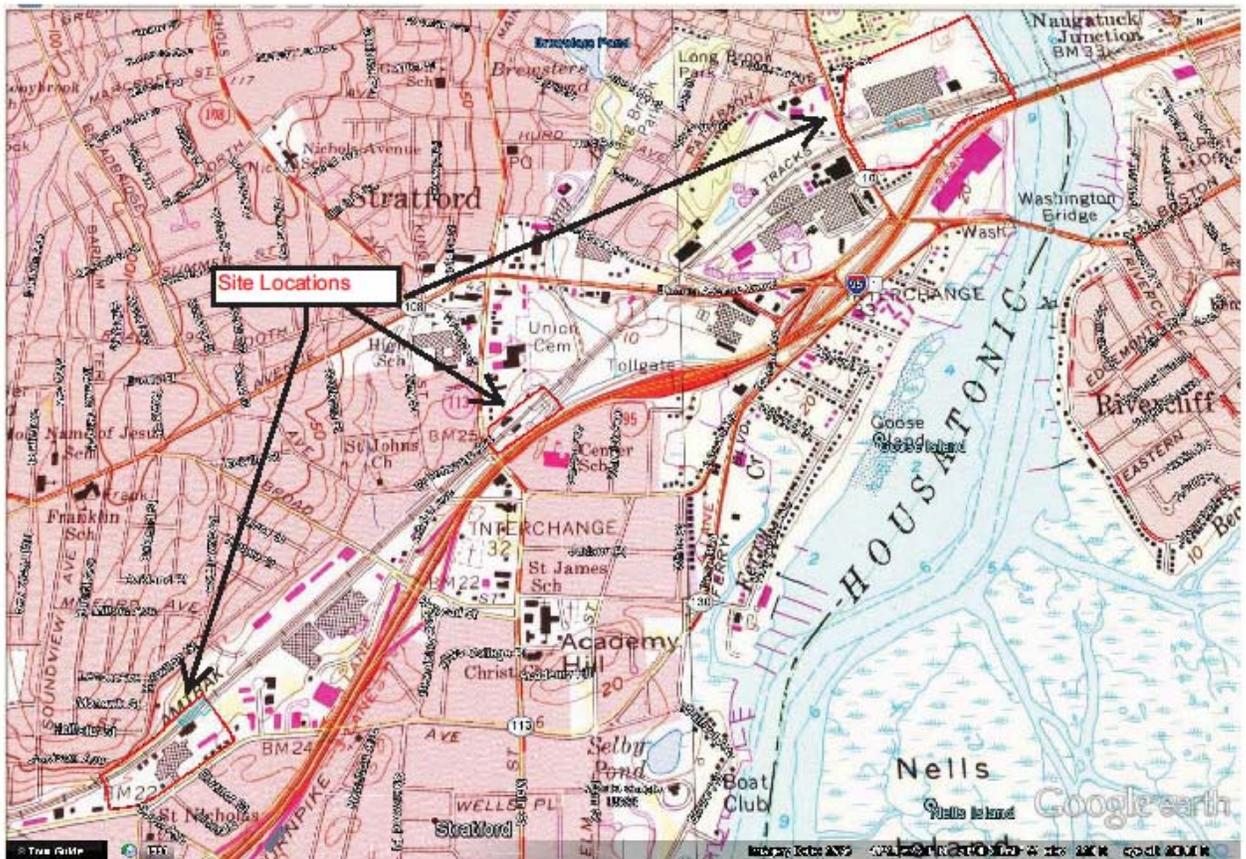


Figure 1 –7.5 min USGS topographic map. Site Location Map, Milford, CT

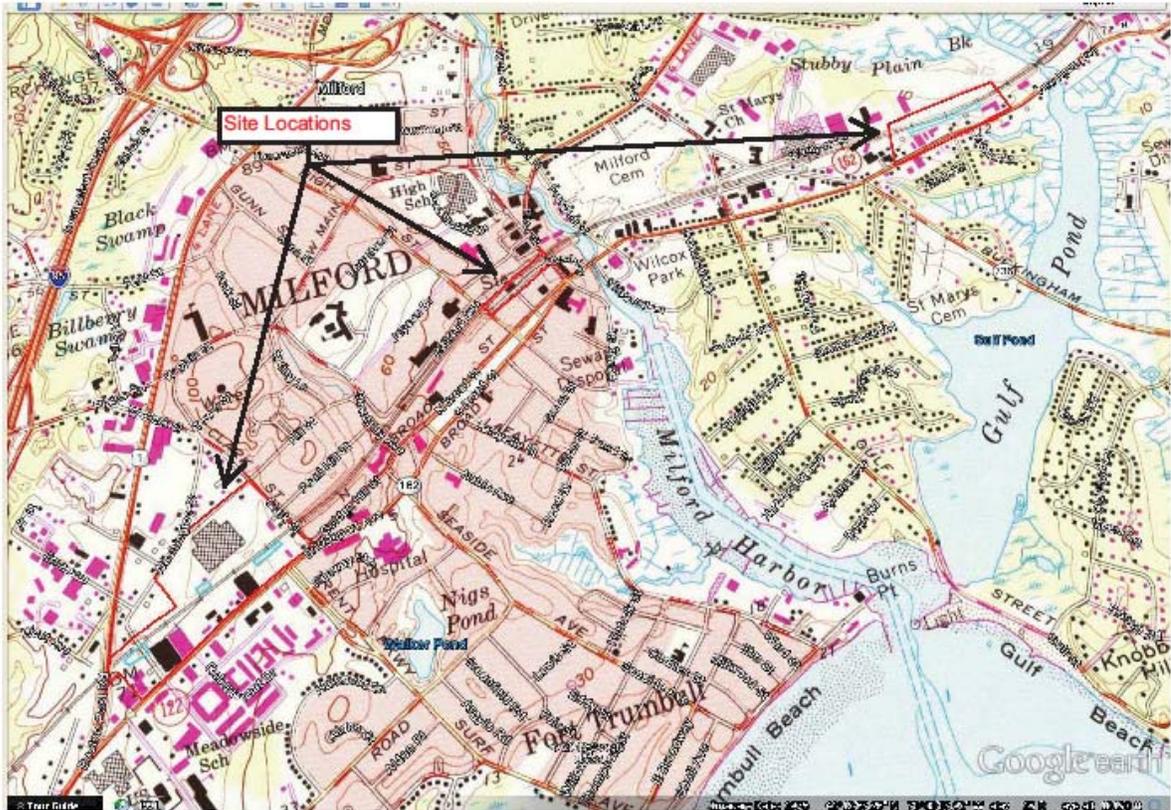


Figure 2 –7.5 min USGS topographic map. Site Location Map, Milford, CT

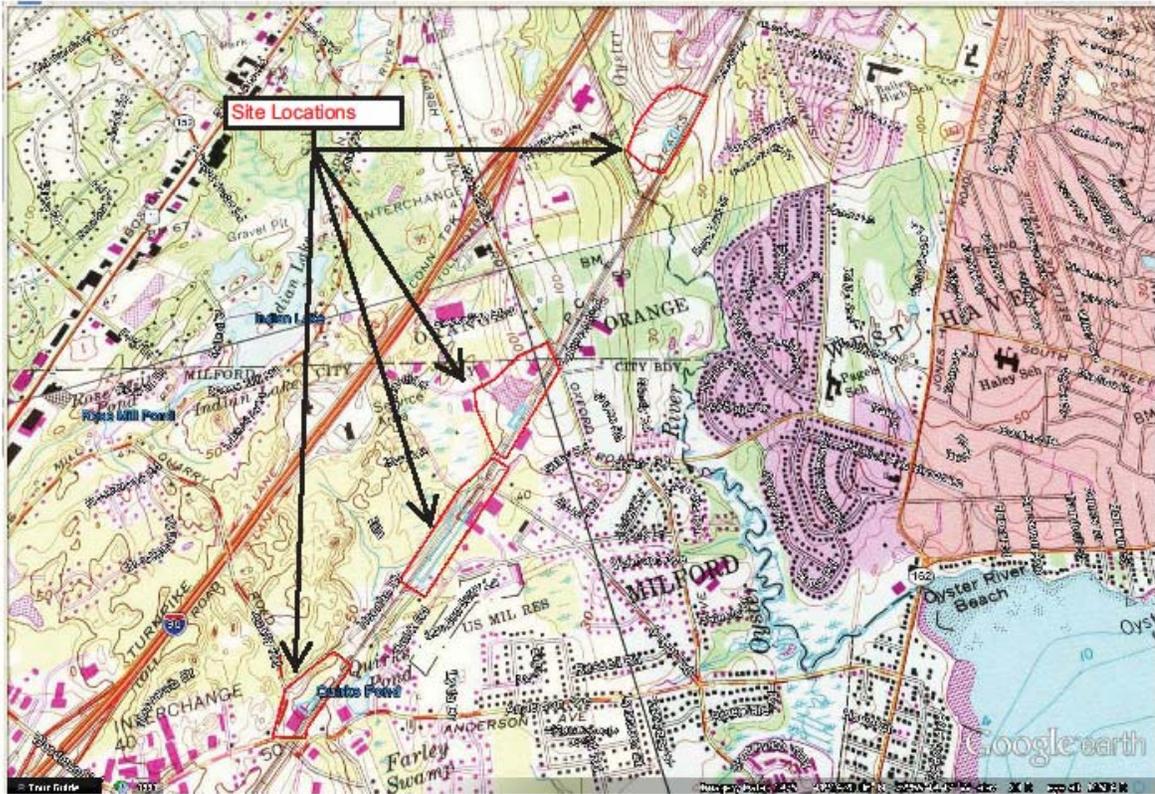


Figure 3 – 7.5 min USGS topographic map. Site Location Map, Milford, CT

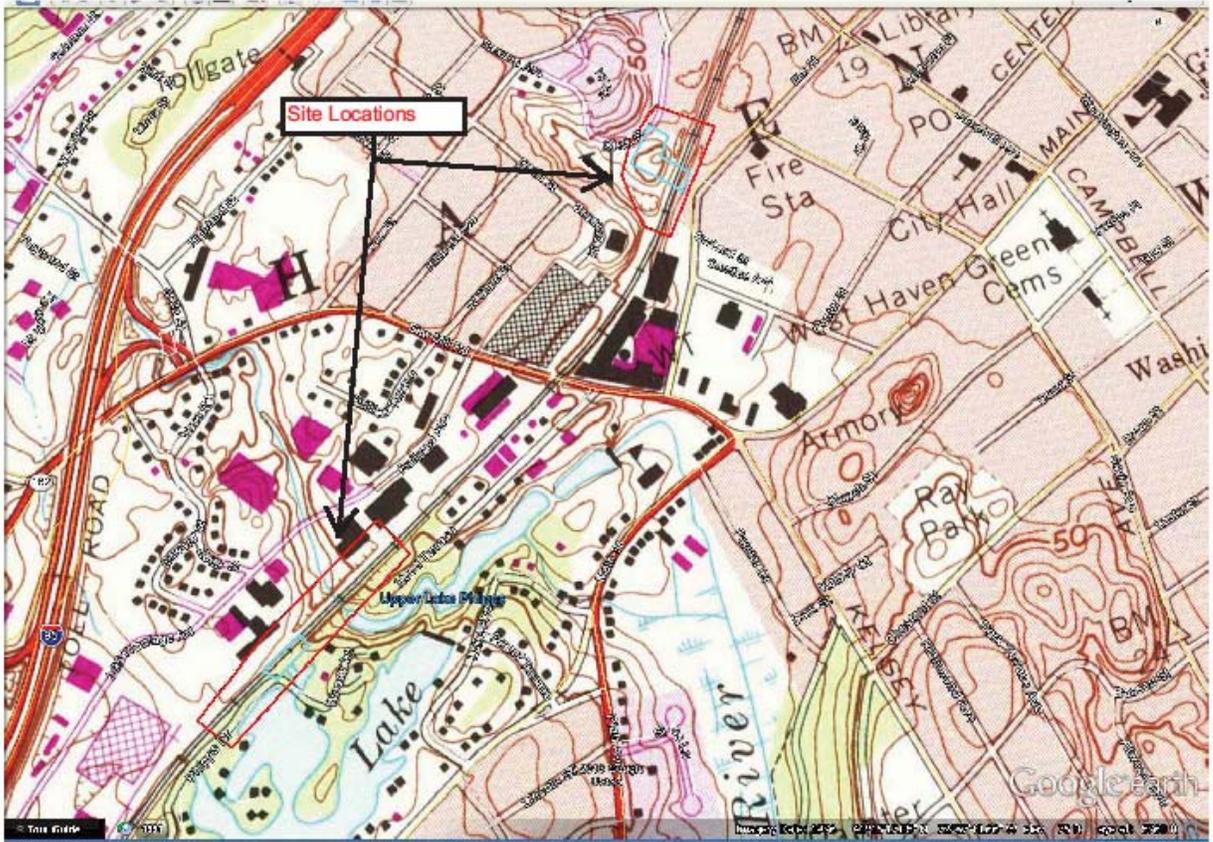


Figure 4 – 7.5 min USGS topographic map. Site Location Map, West Haven, CT

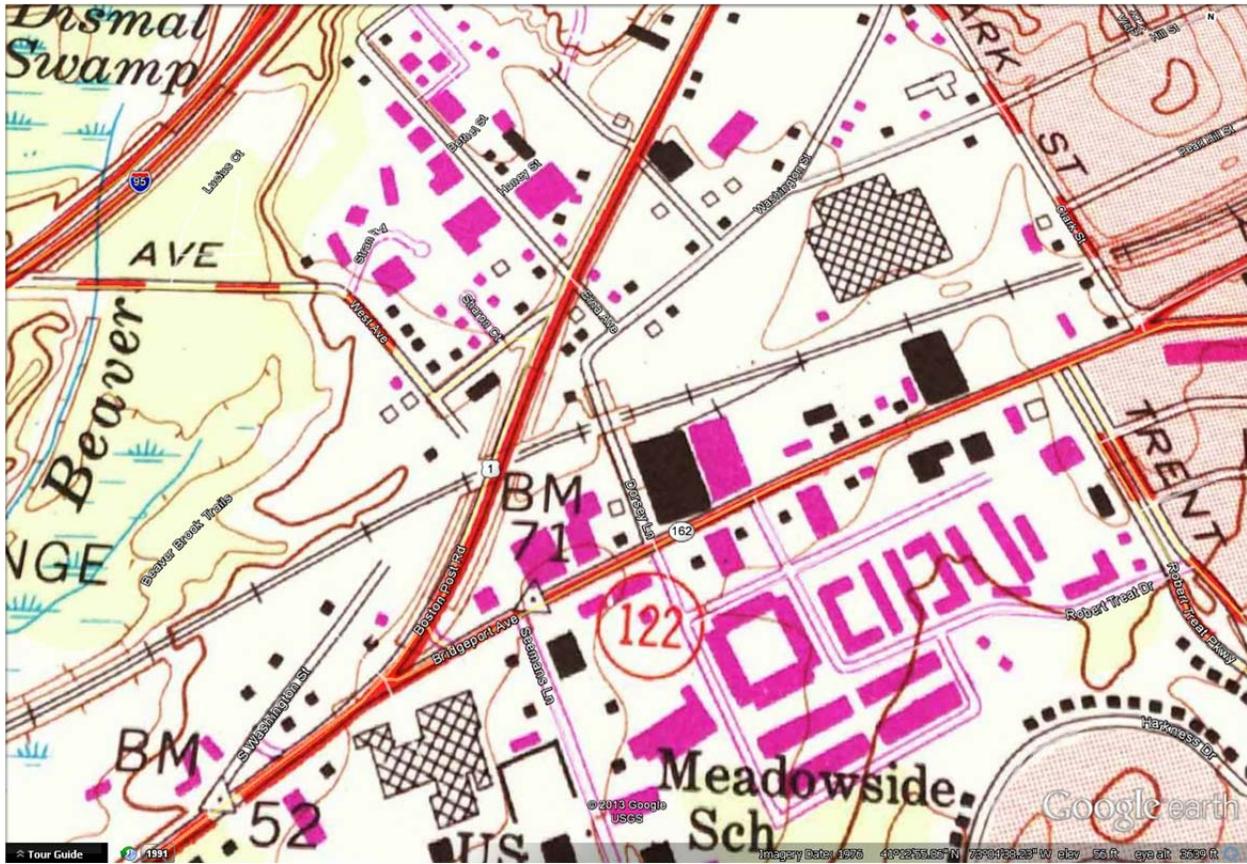


Figure 5 – 7.5 min USGS topographic map. Site Location Map, West Haven, CT

II. METHODS

This investigation involved a wetland/watercourse delineation that was completed by a wetland scientist and qualified soil scientist and conducted in accordance with the principles and practices noted in the United States Department of Agriculture (USDA) Soil Survey Manual (1993). The soil classification system of the National Cooperative Soil Survey was used in this investigation to identify the soil map units present on the project site.

Vegetation, soils, and hydrology were observed and documented during the site investigation in order to meet the criteria of state and federal delineation methodologies. Soil types were identified by observing soil morphology (soil texture, color, structure, etc.). To observe the morphology of the soils, numerous test pits and/or hand borings (generally to a depth of at least two feet) are completed. Where wetland and/or watercourses were determined to be present, their boundaries were identified with flags and hung from vegetation or small wood stakes if in fields or grass communities. These flags are labeled "Wetland Boundary" and generally spaced a

maximum of approximately 50 feet apart. It is important to note that flagged wetland and watercourse boundaries are subject to change until verified by local, state, or federal regulatory agencies.

III. REGULATORY INFORMATION

Wetlands and watercourses are regulated by both state, municipal and federal laws and regulations, each with different definitions and regulatory requirements. Accordingly, the State and municipalities may regulate wetland and waters that fall outside of federal jurisdiction; however, where federal jurisdiction exists concurrent State jurisdiction is almost always present.

State/Municipal Jurisdiction

Wetland determinations are based on the presence of poorly drained, very poorly drained, alluvial, or floodplain soils and submerged land. Watercourses are defined as “rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the state or any portion thereof.” Intermittent watercourse determinations are made based on the presence of a defined permanent channel and bank, and two of the following characteristics: (1) evidence of scour or deposits of recent alluvium or detritus, (2) the presence of standing or flowing water for a duration longer than a particular storm incident, and (3) the presence of hydrophytic vegetation. (See Inland Wetlands and Watercourses Act §22a-38 CGS.)

Federal Jurisdiction

Jurisdictional wetlands at the Federal level consist of “waters of the United States”, which includes lakes, rivers and streams, as well as vegetated wetlands (See 33 CFR 328.8). The onsite waters and wetlands, regulated by the U.S. Army Corps of Engineers (ACOE), were delineated in accordance with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual Northcentral and Northeast Region* (Version 2.0) (January 2012). This *Manual* requires there to be dominant hydrophytic vegetation, hydric soils, and hydrological conditions present in determining wetland areas

IV. FUNCTIONS AND VALUES

Biophysical elements such as a wetland’s landscape position, size, geology, hydrology, substrate, and vegetation determine the wetland functions and to what capacity they are performed. Due to the differing biophysical characteristics between on-site

wetlands, the functions the wetlands provide and the capacity to perform those functions vary. To better understand these differences, a description of the assessed wetland functional values was completed based on the United States Army Corps of Engineers (ACOE) Highway Methodology Workbook (1993) and its supplement workbook. This method requires a description of each of the wetland communities as well as indicating the functions they provide. The ACOE workbook includes the following thirteen (13) functions and values that have been recognized as functions wetlands can provide:

- Groundwater Recharge/Discharge,
- Floodflow Alteration,
- Fish and Shellfish Habitat,
- Sediment/Toxicant Retention,
- Nutrient Removal/Retention/Transformation,
- Production Export,
- Sediment/Shoreline Stabilization,
- Wildlife Habitat,
- Recreation,
- Education/Scientific Value,
- Uniqueness/Heritage,
- Visual Quality/Aesthetics, and
- Endangered Species.

V. SITE INVESTIGATION

The project Site was investigated on November 11 through 15, 2013, with a temperature in the lower 40's °F under partially cloudy skies.

The field investigations were conducted within 13 areas of between School House Road in Milford and west to Savin Avenue in West Haven, Connecticut. Each site includes wetlands within a minimum of 50 feet north and south of the Metro North rail way Right-of-Way, boring and pole locations and areas identified as potential access sites.

Areas identified as jurisdictional wetlands at the federal, state and municipal levels during the field investigations included:

1. A palustrine emergent wetland (PEM) south of the Metro North ROW and north of Stratford Avenue; and
2. A palustrine forested wetland (PFO) south of the Metro North ROW and north of Stratford Avenue; and
3. An ephemeral watercourse leading from Knowlton Street south to the Metro North ROW; and

4. A palustrine emergent wetland (PEM) north of the Metro North ROW and west of Boston Post Road (Route 1); and
5. A riverine intermittent unconsolidated bottom watercourse (R4UB) that is a piped waterway between Interstate 95 South and the Milford Metro North Train Station ; and
6. A palustrine forested wetland (PFO) north of the Metro North ROW associated with Gulf Pond at the end of Wampus Lane; and
7. An ephemeral watercourse leading from Wampus Lane to Gulf Pond; and
8. A palustrine scrub shrub broad-leaved deciduous seasonally flooded/saturated system (PSS1E) east of Marble Lane, north of the Metro North ROW which is associated with an intermittent watercourse (R4UB) and an adjacent forested wetland system (PFO) and;
9. A riverine intermittent watercourse (R4UB) that leads into a scrub shrub wetland; and
10. A palustrine unconsolidated bottom permanently flooded wetland (PUBHx) located south of the Metro North ROW and is part of the Upper Lake Phipps waterway; and
11. A palustrine forested wetland (PFO) south of the Metro North ROW and south west of Depot Road.

Data on the current plant communities, soils, and hydrology were documented to support the wetland delineation. Some of the common plant species observed in the study area are listed in Table 1. Descriptions of the delineated wetland resources are provided in Section VI. Photographs of the identified wetland resources, taken to provide visual documentation of the area, are located in Appendix A. The location of the data points are identified on the wetland mapping located in Appendix C, and data sheets are located in Appendix D.

In the State of Connecticut, vernal pools are identified through field verification as an official vernal pool inventory is not in place at this time. During the field visits, no vernal pools were identified along the project study area.

The site locations are along the Metro North railway system. At one point, the railway system crosses the Housatonic River; however, work is not scheduled near this area and there will be no disturbance to any tidal wetlands/watercourses or essential fish habitats.

Table 1: Common Plants in the Study Area and the Wetland Indicator Status

Common Name	Scientific Name	Indicator Status
Tree Stratum		
Black Willow	<i>Quercus bicolor</i>	OBL
Red Maple	<i>Acer rubrum</i>	FAC
Sapling, Shrub and Vine Stratum		
Red Maple	<i>Acer rubrum</i>	FAC
Southern Arrow-Wood	<i>Viburnum dentatum</i>	FAC
Highbush Blueberry	<i>Vaccinium corymbosum</i>	FACW
Coastal Sweet-Pepperbush	<i>Clethra alnifolia</i>	FAC
Common Buttonbush	<i>Cephalanthus occidentalis</i>	OBL
Speckled Alder	<i>Alnus incana</i>	FACW
Rambler Rose	<i>Rosa multiflora</i>	FACU
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	FACU (non-native-invasive)
Northern Spicebush	<i>Lindera benzoin</i>	FACW
Herb Stratum		
Common Reed	<i>Phragmites australis</i>	FACW (non-native-invasive)
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW
Lamp Rush	<i>Juncus effuses</i>	OBL
Cinnamon Fern	<i>Osmunda cinnamomea</i>	FACW
Skunk-Cabbage	<i>Symplocarpus foetidus</i>	OBL
Rambler Rose	<i>Rosa multiflora</i>	FACU

Source: Lichvar, R.W. 2012 *The National Wetland Plant List; 2013 wetland ratings, Phytoneuron 2013-49; 1-241.* http://wetland_plants.usace.army.mil/

Cold Regions Research and Engineering Laboratory, US Army Corps of Engineers.

VI. RESOURCE DESCRIPTIONS

Wetland 1: USFWS Classification: PEM

This wetland is classified as palustrine emergent nonpersistent (PEM2) and is a small sparsely vegetated depression. This wetland is located south of the Metro North ROW. The area is sandwiched between a substation to the west and an abandoned parking lot to the west. This area is extremely disturbed due to the development of the property surrounding it. Hydrologic conditions are influenced by the storm water runoff, ponding, and groundwater connection. This area was delineated with sequentially numbered flags 1 through 05 (closed loop.) The soil profile is considerably disturbed from historic site activities.

The wetland soil series identified are Charlton-Urban Land Complex, Udorthents and urban land. The Charlton series consists of very deep, well drained loamy soils formed in till derived from parent materials that are very low in iron sulfides. They are nearly level to very steep soils on till plains and hills. Slope ranges from 0 to 50 percent. Saturated hydraulic conductivity is moderately high or high. Udorthents consist primarily of areas that have been cut for leveling or filled for development.

This wetland provides the following primary function: sediment/toxicant retention.

The wetland 1 has no designation in the Flood Insurance Rate Map for Fairfield County, Connecticut (09001C0442G), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Wetland 2: USFWS Classification: PFO1

Wetland 2 is classified as a palustrine forested broad-leaved deciduous system (PFO1) located south of the Metro North ROW and north of Route 130 (Stratford Avenue) in Milford, CT. The wetland is situated between the rail way to the north, a brewery to the west, residential housing to the east and a busy two lane road to the south. This area is highly disturbed. This medium sized wetland is a result of drainage through underground pipes and exhibits alluvial sandy soils. This area was delineated using sequentially numbered flags 1 through 15 (open at both ends) on the west side of the wetland only. The wetland is dominated by Red maple (*Acer rubrum*) and Black willow (*Salix nigra*). The upland area is dominated by oriental bittersweet (*Celastrus orbiculatus*) and Japanese Knotweed (*Polygonum cuspidatum*), both are considered non-native and invasive plants. The soil profile is considerably disturbed from historic site activities.

The soil series identified is Udorthents-Urban land complex- Udorthents consist primarily of areas that have been cut for leveling or filled for development. Hydrologic conditions are influenced by the storm events.

This wetland provides the following functions and values: groundwater recharge/discharge, flood flow alteration, wildlife habitat. The primary function is flood flow alteration.

The wetland 2 has no designation in the Flood Insurance Rate Map for Fairfield County, Connecticut (09001C0442G), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Wetland 3: USFWS Classification: PEM

Wetland 3 is classified as a palustrine emergent persistent wetland (PFO1) located on the south side of the site, east of Boston Post Road (Route 1) and west of Dorsey Lane. Hydrologic conditions are influenced by the storm events and overland runoff. This area was delineated using sequentially numbered flags 1 through 18 (closed loop). The wetland is dominated by Common Reed (*Phragmites australis*), which is considered a non-native and aggressive invasive plant.

The soil series identified is Udorthents-Urban land complex- Udorthents consist primarily of areas that have been cut for leveling or filled for development.

Wetland 3 provides the following primary function: flood flow alteration.

The wetland 3 has no designation in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0529J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Wetland 4: USFWS Classification: PFO1

Wetland 4 is classified as a palustrine forested broad-leaved deciduous system (PFO1) located on the north side of the site, east of Wampus Lane. This large wetland system receives water from Indian River and flows into Gulf Brook. Hydrologic conditions are influenced by the storm events, tidal exchange of Gulf Brook, Indian River, groundwater connection and surface ponding. This area was delineated using sequentially numbered flags 1 through 25 (open ended). The wetland is dominated by Red maple (*Acer rubrum*) trees. A path, partially paved, partially dirt, runs parallel to the Metro North railway along the southern border of the wetland.

The soil series identified is Udorthents soils. Udorthents consist primarily of areas that have been cut for leveling or filled for development.

Wetland 4 provides the following high quality functions and values: groundwater recharge/discharge, flood flow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient removal/retention/transformation, product export, wildlife habitat, recreation. The primary functions and values include: flood flow alteration, sediment/toxicant retention, wildlife habitat, and recreation

The wetland 4 is designated as "Zone AE", in the Flood Insurance Rate Map for Fairfield County, Connecticut (09009C0531J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Wetland 5: USFWS Classification: PSS1E

Wetland 5 is classified as a palustrine scrub shrub broad-leaved deciduous seasonally flooded/saturated system (PSS1E) located north of the Metro North ROW, and east of Marble Lane. Wetland 5 is part of a large wetland system that expands beyond the site. Hydrologic conditions are influenced by Indian Lake, tributaries, storm events, and surface ponding. It is located between residential housing, Metro North Railway, and commercial property. Disturbance is apparent as there are remnants of soil mounds and berms around the wetland. This area was delineated using sequentially numbered flags 1 through 12 (open ended). Flag 12 connects to Watercourse 4 flags 01 and 101. The wetland is dominated by Common Buttonbush (*Cephalanthus occidentalis*).

The soil series identified is Catden and Freetown. Catden series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials in depressions on lake plains, outwash plains, moraines, and flood plains. Saturated hydraulic conductivity ranges from moderately low to high. Slope ranges from 0 to 2 percent. The mean annual temperature is about 13 degrees C and the mean annual precipitation is about 1258 mm. The Freetown series consists of very deep, very poorly drained organic soils formed in more than 130 centimeters of highly decomposed

organic material. They are commonly in depressions or on level uplands and alluvial plains. Slope ranges from 0 to 2 percent. Saturated hydraulic conductivity is moderately high or high. The mean annual temperature is about 9 degrees Celsius and mean annual precipitation is about 1205 millimeters.

Wetland 5 provides the following functions and values: groundwater recharge/discharge, flood flow alteration, fish and shellfish habitat, sediment/toxicant retention, nutrient/toxicant retention, nutrient removal/retention/transformation, product export, wildlife habitat, visual quality/ aesthetics. The primary functions and values for wetland 5 include: groundwater recharge/discharge, flood flow alteration, sediment/toxicant retention, nutrient/toxicant retention, nutrient removal/retention/transformation, and wildlife habitat.

The wetland 5 is designated as "Other Flood Areas", in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0532J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Wetland 6: USFWS Classification: PFO

Wetland 6 is classified as a palustrine forested broad-leaved deciduous system (PFO1) located north of the Metro North ROW, and south of McQuillan Drive. Wetland 6 is part of a large wetland system that expands beyond the site and is connected to wetland 5 by watercourse 4. Hydrologic conditions are influenced by Indian Lake, tributaries, storm events, and surface ponding. It is located between residential housing, Metro North Railway, and commercial property. Disturbance is apparent as there is a berm running the length of the wetland on the north side. This area was delineated using sequentially numbered flags 201 through 217 and connects back to flag 04 (open ended). Flag 217 connects to Watercourse 4 flag number 12. The wetland is dominated by Red maple (*Acer rubrum*).

The soil series identified is Timakwa and Natchaug. The Timakwa series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials over sandy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. Saturated hydraulic conductivity is moderately low to high in the organic layers and high or very high in the sandy material. Slope ranges from 0 to 2 percent. Mean annual temperature is about 13 degrees C and the mean annual precipitation is about 1258 mm. The Natchaug series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials overlying loamy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. Saturated hydraulic conductivity is moderately low to very high in the organic layers and moderately low to high in the loamy material. Slope ranges from 0 to 2 percent. Mean annual temperature is about 9 degrees Celsius and mean annual precipitation is about 1194 millimeters.

Wetland 6 provides the following functions and values: groundwater recharge/discharge, flood flow alteration, sediment/toxicant retention, nutrient/toxicant retention, nutrient removal/retention/transformation, wildlife habitat,

visual quality/ aesthetics. The primary functions and values for wetland 6 include: flood flow alteration, sediment/toxicant retention, nutrient/toxicant retention, nutrient removal/retention/transformation, and wildlife habitat.

The wetland 6 is designated as "Other Flood Areas", in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0532J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Wetland 7: USFWS Classification: PFO

Wetland 7 is classified as a palustrine forested broad-leaved deciduous system (PFO1) located north of the Metro North ROW, and south of Heffernan Drive. It is located between the Metro North Railway, and commercial property. Disturbance is apparent as there is a berm running the length of the wetland on the north side. Hydrologic conditions are influenced by the storm events. A culvert is located at the south west end of the wetland. This area was delineated using sequentially numbered flags 01 through 25 (open ended) and continues off site. The wetland is dominated by Black willow (*Quercus bicolor*) and Common Reed (*Phragmites australis*), which is considered a non-native and aggressive invasive plant.

The soil series identified is Udorthents-Urban land complex- Udorthents consist primarily of areas that have been cut for leveling or filled for development.

Wetland 7 provides the following functions and values: flood flow alteration, sediment/toxicant retention, and nutrient/toxicant retention. The primary function of wetland 8 is flood flow retention.

The wetland 7 is designated as "Zone x", in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0438H), effective December 17, 2010. Please refer to Appendix D for FEMA FIRM Map.

Wetland 8: USFWS Classification: PFO1

Wetland 8 is classified as a palustrine forested broad-leaved deciduous system (PFO1) located south of the Metro North ROW and south west of Depot Road. This area was delineated using sequentially numbered flags 01 through 11. The wetland is located between the train tracks and a commercial property. There is a small drainage ditch that leads from Depot Road, transporting overland flow to the wetland. Hydrologic conditions are influenced by overland runoff, drainage and precipitation. Wetland 8 is disturbed. The north west edge of wetland 8 is the toeslope of the railroad tracks. Berms form the south east edge of the wetland. Forest regrowth surrounds the wetland along the western boundary; however, mounds of dirt, trash and debris are prominent throughout the upland forest. This wetland is dominated by Red Maple (*Acer rubrum*) and Coastal Sweet-Pepperbush (*Clethra alnifolia*).

The soil series identified is Udorthents-Urban land complex- Udorthents consist primarily of areas that have been cut for leveling or filled for development.

Wetland 8 provides the following functions and values: flood flow alteration, sediment/toxicant retention, wildlife habitat and nutrient/toxicant retention. The primary function of wetland 8 is flood flow retention.

The wetland 8 has no designation in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0532J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Watercourse 1: Classification: Ephemeral

Watercourse 1 is classified as an ephemeral stream and is active only during and post storm events. This watercourse receives overland runoff from a storm drain leading from Knowlton Street south toward the Metro North ROW where it stops. This area was delineated using sequentially numbered flags 1 through 3 (open ends). The bed and bank is will defined due to the velocity of water and scour. The bottom consists of bedrock and boulders. The banks on both sides are approximately three feet in height. There was no water present at time of inspection.

The watercourse 1 has no designation in the Flood Insurance Rate Map for Fairfield County, Connecticut (09001C0442G), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map

Watercourse 2: USFWS Classification: R4UB4

Watercourse 2 is classified as a riverine intermittent unconsolidated bottom organic watercourse (R4UB4) that feeds a wetland off site. This area was delineated using sequentially numbered flags 01 through 05 on the north side of the feature and 101 through 105 on the south side of the feature (open ends). A culvert stands at the east end of the watercourse. At the time of field visit, there was no flowing water in the channel. The channel was approximately 6 feet wide with 8 to 20 feet banks. Defined bed and bank were present and the bed consisted of organic material. Scour, alluvial deposits and detritus were present at time of field visit. Japanese knotweed (*Polygonum cuspidatum*) a non-native invasive plant species dominated the southern bank of Watercourse 2.

The watercourse 2 is designated as "Zone AE", in the Flood Insurance Rate Map for Fairfield County, Connecticut (09001C0434G), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Watercourse 3: Classification: Ephemeral

Watercourse 3 is classified as an ephemeral stream and is active only during and post storm events. This area was delineated using sequentially numbered flags 01 through 05 (open ends). This watercourse receives overland runoff from Wampus lane leading north toward to wetland 3 where it continues off site. The channel is man-made and

straight. The bed and bank is will defined with organic bottom. The channel is approximately 3 feet wide with wetland vegetation, Coastal Sweet Pepper-Bush (*Clethra alnifolia*), in the channel. No water was present at time of inspection.

The watercourse 3 has no designation in the Flood Insurance Rate Map for Fairfield County, Connecticut (09009C0531J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Watercourse 4: USFWS Classification: R4UB4

Watercourse 4 is classified as a riverine intermittent unconsolidated bottom organic watercourse (R4UB4) that connects wetlands 5 and 6. Watercourse 4 becomes wetland 6 as the channel definition recedes and wetland vegetation, pitting and mounding become pronounced. This area was delineated using sequentially numbered flags 01 through 17 on the north side and 101 through 117 on the south side (open ends). A weir stands at the north east end of the watercourse. The bottom consists of a mixture of organic material, boulders, cobble, gravel and sand. At the time of field visit, there was approximately 1 foot of ponding at then north east end near the weir. The channel was approximately 4 to 6 feet wide with 8 to 20 foot banks. Defined bed and banks, drainage patters, alluvial deposits and debris were present.

The watercourse 4 is designated as "Other Flood Areas", in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0532J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Watercourse 5: USFWS Classification: R4UB4

Watercourse 4 is classified as a riverine intermittent unconsolidated bottom cobble gravel watercourse (R4UB4). Watercourse 5 starts at the edge of a commercial property where a culvert and storm drain lead into the watercourse. This area was delineated using sequentially numbered flags 01 through 16 (open ends) and ends in a drainage swale to the east. The bottom consists of a mixture of cobble and sand. At the time of field visit, there was no water in the channel. The channel was approximately 3 feet wide with 1 to 6 foot banks. Defined bed and banks, drainage patters, alluvial deposits and debris were present.

The watercourse 5 is designated as "Other Flood Areas", in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0532J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Watercourse 6: Classification: Ephemeral

Watercourse 6 is classified as an ephemeral stream and is active only during and post storm events. This area was delineated using sequentially numbered flags 01 through 12 (open ends). This watercourse receives overland runoff from Marsh Hill Road flowing west toward Wetland 4. The bed and bank is will defined with organic bottom. The

channel is approximately 3 feet wide and the banks approximately 3 feet high. No water was present at time of inspection.

The watercourse 6 has no designation in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0532J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Watercourse 7: USFWS Classification: R4UB4

Watercourse 7 is classified as a riverine intermittent unconsolidated bottom sand watercourse (R4UB4). Watercourse 7 starts at the west end of Washington Street, on the east side of Route 1, at a culvert leading from under the west end of Washington Street. This section of the watercourse is 2 to 3 feet wide with well-defined bed and bank. The watercourse then flows south along the edge of Route 1 where it eventually becomes 10 to 30 feet wide between the edge of the Route 1 overpass and the railroad. The water flow in this vicinity is more diffuse. The watercourse then turns west and flows under Route 1. The channel meets with flows from another culvert which discharges on the west side of Route 1. The watercourse continues to flow in a westerly direction following a drainage swale adjacent to the railroad embankment. The delineation ended at Catenary Pole 892. This area was delineated using sequentially numbered flags 01 through 19 on the southern edge and 101 through 122 on the northern edge (open ended at both ends). The bottom consisted of alluvial sand. At the time of field visit, there was no water in the channel. The channel was approximately 2 to 30 feet wide at various locations and the banks were 2 inches to 1 foot high. Defined bed and banks, drainage patterns, alluvial deposits and debris were present. Vegetation along the edge of watercourse 7 was dominated by multiflora rose (*Rosa multiflora*), which is considered an invasive non-native species in the state of Connecticut.

Watercourse 7 has no designation in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0529J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

Watercourse 8: USFWS Classification: PUBHx

Watercourse 8 is classified as a palustrine unconsolidated bottom permanently flooded watercourse (PUBHx) located on the south side of the Metro North ROW, and east of Phipps Drive and is part of the Phipps Lake system. This open water wetland system has a man-made dam and drainage swale on the north side. This area was delineated using sequentially numbered flags 01 through 06 on the north side and 101 through 104 on the south side (open ends). The wetland had no visible plants. The soil series identified is Water.

Watercourse 8 has no designation in the Flood Insurance Rate Map for New Haven County, Connecticut (09009C0439J), effective July 8, 2013. Please refer to Appendix D for FEMA FIRM Map.

VII. SUMMARY

BL Companies identified eight (8) regulated and jurisdictional freshwater inland wetland areas and eight (8) watercourses on the Site. Poorly drained soils, hydric soils, hydrophytic vegetation, and hydrology were all observed in the wetland locations satisfying the criteria of the State and ACOE methodology for wetland delineations. All watercourses consisted of a defined permanent channel and bank, and evidence of scour or deposits of recent alluvium or detritus. In addition to the descriptions within the previous sections of this report, supporting data forms and photographs are attached that document the findings of the on-site field investigations.

VIII. PREPARER

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203-630-1406

Ms. Huebner holds a Master's Degree in Wetland, Watercourse and Ecosystem Management and Soil Science. Ms. Huebner has been delineating federal and state wetlands for the past 4 years. In addition, Ms. Huebner has acted as lead wetland scientist and conducted many function value impact assessments throughout New England, New York, New Jersey, Pennsylvania and Ohio. Ms. Huebner received a Certificate of Army Corps Wetland Delineation Training (Institute for Wetland Education and Environmental Research), holds a Wetland Professional in Training certification. Ms. Huebner is a standing member of the Society of Soil Scientists of Southern New England, is a Soil Scientist, and meets the criteria as a Soil Scientist in the State of Connecticut.

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APPENDIX A

Wetland 1: Looking West



Wetland 2: looking west



Wetland 3: North side of ROW looking west toward Boston Post Rd (Route 1)



Wetland 4: Looking North



Wetland 5: looking north



Wetland 6: looking north



Wetland 7: looking at the man-made dam to the east



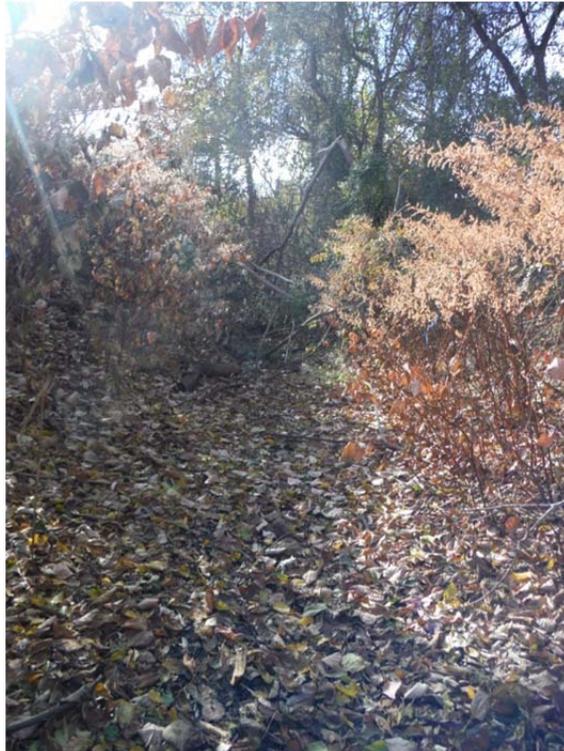
Wetland 8: looking north



Watercourse 1 : Looking down stream toward Metro North Railway



Watercourse 2 : Looking west toward culvert



Watercourse 3 : Looking north



Watercourse 4: Looking north



Watercourse 4: Looking south at weir and wetland 5



Watercourse 5: Looking east



Watercourse 6: Looking south



Photograph: Watercourse 7 looking east from the catenary 892 toward Route 1.



Photograph: Widest area of Watercourse 7 looking East from under Route 1 bridge



APPENDIX B



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WETLAND DELINEATION SKETCH
 VICINITY OF ROUTE 1 AND DORSEY LN
 TOWN OF MILFORD
 STATE OF CONNECTICUT

Drawn and
 Checked by
 Scale: 1" = 50'
 Date: 12/29/2013
 CADD File: E:\3101001-00004

WD-12

REV. 2013-12-20

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APPENDIX C

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC City/County: Stratford Sampling Date: 11/11/2013
 Applicant/Owner: UI State: _____ Sampling Point: Wetland 1
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>Wetland 1</u>
Remarks: (Explain alternative procedures here or in a separate report.) Wetland 1 is a man-made depression wetland and highly disturbed. It is located between two commercial properties, the Metro North Railway and Route 1.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>4 inches</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Vegetation was absent from Wetland 1, however, hydric soil and hydrology were present.	

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland 1

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 feet</u>)				
1.				
2. None				
3.				
4.				
5.				
6.				
7.				
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1.				
2. None				
3.				
4.				
5.				
6.				
7.				
				_____ = Total Cover
Herb Stratum (Plot size: <u>5 feet</u>)				
1.				
2. None				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
				_____ = Total Cover
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1.				
2. None				
3.				
4.				
				_____ = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Wetland 1 is a highly disturbed area. This wetland is an abandoned depression due to construction.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC City/County: Stratford Sampling Date: 11/11/2013
 Applicant/Owner: UI State: CT Sampling Point: Upland 1
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland 1 is located between two commercial properties, the Metro North Railway and Route 1 and highly disturbed. There are man-made depressions, berms and fences around the area	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: No hydrology indicators were met. Soil was well drained at sample point. This is a non-wetland sample point.	

VEGETATION – Use scientific names of plants.

Sampling Point: Upland 1

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus palustris</u>	50	Y	FACW	
2. <u>Prunus serotina</u>	10		FACU	
3. <u>Acer platanoides</u>	10		FACU	
4. _____				
5. _____				
6. _____				
7. _____				
	70	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rosa multiflora</u>	10	Y	FACU	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	10	= Total Cover		
Herb Stratum (Plot size: <u>5 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Solidago patula</u>	40	Y	OBL	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	40	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Toxicodendron radicans</u>	10	Y	FAC	
2. _____				
3. _____				
4. _____				
	10	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Hydrophytic vegetation is present and dominant at the upland sample point, however soil and hydrology are missing from the plot and is therefore considered non-wetland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC City/County: Stratford Sampling Date: 11/11/2013
 Applicant/Owner: UI State: _____ Sampling Point: Wetland 2
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>Wetland 2</u>
Remarks: (Explain alternative procedures here or in a separate report.) Wetland 2 is located between two commercial properties, the Metro North Railway and Route 1. Two culverts are prominent at the wetland boundary.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Wetland 2 meets one primary and two secondary hydric soil indicators: Presence of reduced iron, geomorphic position and microtopographic relief.	

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland 2

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix nigra</u>	40	Y	OBL	
2. <u>Acer rubrum</u>	40	Y	FAC	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>80</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <u>Acer rubrum</u>	20	Y	FAC	
2. <u>Viburnum dentatum</u>	30	Y	FAC	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5 feet</u>)				
1. <u>Phragmites australis</u>	30	Y	FACW	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
<u>30</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1. _____				
2. <u>None</u>				
3. _____				
4. _____				
<u>0</u> = Total Cover				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Wetland 2 is a highly disturbed area. Japanese Knotweed (*Fallopia japonica*, invasive, non-native) is dominant (90% coverage) in the upland area around wetland 2.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UH-NERC City/County: Stratford Sampling Date: 11/11/2013
 Applicant/Owner: UI State: CT Sampling Point: Upland 2
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		If yes, optional Wetland Site ID: _____	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks: (Explain alternative procedures here or in a separate report.)					
Upland 2 is located adjacent to the Metro North Railway in an area where fill material was placed.					

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required):	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	_____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	_____
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	_____
		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
No wetland hydrology indicators were met. Soil was well drained at sample point. This is a non-wetland sample point.			

VEGETATION – Use scientific names of plants.

Sampling Point: Upland 2

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer rubrum</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	<u>30</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	_____ = Total Cover			
Herb Stratum (Plot size: <u>5 feet</u>)				
1. <u>Fallopia japonica</u>	<u>90</u>	<u>Y</u>	<u>FACU</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>90</u> = Total Cover			
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
	_____ = Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Hydrophytic vegetation is not present at the upland sample point and is considered non-wetland

SOIL

Sampling Point: Upland 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-12	10YR 2/2	100				L	

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC (Cat 894) City/County: Stratford Sampling Date: 11/11/2013
 Applicant/Owner: UI State: _____ Sampling Point: Wetland 3
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>Wetland 3</u>
Remarks: (Explain alternative procedures here or in a separate report.) Wetland 3 is located between a man-made berm and commercial property to the south and the side slope to the Metro North railway to the north.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Wetland 3 meets two primary and two secondary hydric soil indicators: Presence of reduced iron, hydrogen sulfide odor, geomorphic position and microtopographic relief.	

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland 3

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 feet</u>)				
1. None				
2.				
3.				
4.				
5.				
6.				
7.				
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <i>Rosa multiflora</i>	20	Y	FACU	
2. <i>Viburnum dentatum</i>	10	Y	FAC	
3.				
4.				
5.				
6.				
7.				
				_____ = Total Cover
Herb Stratum (Plot size: <u>5 feet</u>)				
1. <i>Phragmites australis</i>	75	Y	FACW	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
				_____ = Total Cover
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1.				
2. None				
3.				
4.				
				_____ = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Wetland 3 meets the hydrophytic vegetation criteria and dominance test.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UH-NERC (Cat 894) City/County: Stratford Sampling Date: 11/11/2013
 Applicant/Owner: UI State: CT Sampling Point: Upland 3
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): backslope Local relief (concave, convex, none): none Slope (%): 10
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland 3 is located on a berm between a commercial lot and wetland 3.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: No wetland hydrology indicators were met. Soil was well drained at sample point. This is a non-wetland sample point.	

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UH-NERC (Cat 926-931) City/County: Stratford Sampling Date: 11/13/2013
 Applicant/Owner: UI State: CT Sampling Point: Wetland 4
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>Wetland 4</u>
Remarks: (Explain alternative procedures here or in a separate report.) Wetland 4 is transected by a partially abandoned road used as a foot path.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Wetland 4 meets two primary and two secondary hydric soil indicators: Presence of reduced iron, inundation visible on aerial imagery, geomorphic position and microtopographic relief.	

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland 4

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>80</u>	<u>Y</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
<u>80</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Vaccinium corymbosum</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>
2. <u>Clethra alnifolia</u>	<u>30</u>	<u>Y</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
<u>60</u> = Total Cover			
Herb Stratum (Plot size: <u>5 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Onoclea sensibilis</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>
2. <u>Osmunda cinnamomea</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>
3. <u>Juncus effusus</u>	<u>5</u>	_____	<u>OBL</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
<u>35</u> = Total Cover			
Woody Vine Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. <u>None</u>	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
_____ = Total Cover			

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
 Total Number of Dominant Species Across All Strata: 5 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (AB)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL species _____ x 5 = _____
 Column Totals: _____ (A) _____ (B)
 Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (Include photo numbers here or on a separate sheet.)
Wetland 4 meets the hydrophytic vegetation criteria and dominance test.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UH-NERC (Cat 926-931) City/County: Stratford Sampling Date: 11/13/2013
 Applicant/Owner: UI State: CT Sampling Point: Upland 4
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): none Slope (%): 1
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland 4 is located adjacent to an abandoned road.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: No wetland hydrology indicators were met. Soil was well drained at sample point. This is a non-wetland sample point.	

VEGETATION – Use scientific names of plants.

Sampling Point: Upland 4

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Fagus grandifolia</u>	<u>60</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Prunus serotina</u>	<u>10</u>		<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	<u>70</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <u>Euonymus alatus</u>	<u>15</u>	<u>Y</u>	<u>UPL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	<u>15</u> = Total Cover			
Herb Stratum (Plot size: <u>5 feet</u>)				
1. <u>Berberis thunbergii</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>10</u> = Total Cover			
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
	_____ = Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Hydrophytic vegetation is not present at the upland sample point and is considered non-wetland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC (Cat 968) City/County: Millford Sampling Date: 11/13/2013
 Applicant/Owner: UI State: CT Sampling Point: Wetland 5
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>Wetland 5</u>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>1"</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0"</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0"</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Wetland 5 meets four primary and two secondary hydric soil indicators: Surface Water, high water table, saturation, geomorphic position and microtopographic relief.			

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland 5

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 feet</u>)				
1. None				
2.				
3.				
4.				
5.				
6.				
7.				
	_____ = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <i>Cephalanthus occidentalis</i>	60	Y	OBL	
2. <i>Alnus incana</i>	40	Y	FACW	
3.				
4.				
5.				
6.				
7.				
	100 = Total Cover			
Herb Stratum (Plot size: <u>5 feet</u>)				
1.				
2. None				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	_____ = Total Cover			
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1.				
2. None				
3.				
4.				
	_____ = Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Wetland 5 meets the hydrophytic vegetation criteria, Rapid test and dominance test.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC (Cat 968) City/County: Millford Sampling Date: 11/13/2013
 Applicant/Owner: UI State: CT Sampling Point: Upland 5
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland 5 is located adjacent to a disturbed area near the Metro North railway, berms and a weir.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: No wetland hydrology indicators were met. Soil was well drained at sample point. This is a non-wetland sample point.	

VEGETATION – Use scientific names of plants.

Sampling Point: Upland 5

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Prunus serotina</u>	40	Y	FACU	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	40 = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <u>Alnus incana</u>	15	Y	FACW	
2. <u>Rosa multiflora</u>	20	Y	FACU	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	35 = Total Cover			
Herb Stratum (Plot size: <u>5 feet</u>)				
1. <u>Fallopia japonica</u>	30	Y	UPL	
2. <u>Rosa multiflora</u>	20	Y	FACU	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	50 = Total Cover			
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
	= Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Hydrophytic vegetation is not present at the upland sample point and is considered non-wetland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC (Cat 968) City/County: Millford Sampling Date: 11/14/2013
 Applicant/Owner: UI State: CT Sampling Point: Wetland 6
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): concave Slope (%): 1
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
			If yes, optional Wetland Site ID: <u>Wetland 6</u>
Remarks: (Explain alternative procedures here or in a separate report.) <u>Flood plain area from watercourse 6</u>			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required):	
Primary Indicators (minimum of one is required; check all that apply)			
<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> Microtopographic Relief (D4)	
<input type="checkbox"/> FAC-Neutral Test (D5)			
Field Observations:			
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>1"</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>4"</u>		
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0"</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: <u>Wetland 6 meets six primary and two secondary hydric soil indicators: Surface Water, high water table, saturation, sparsley vegetated concave surface, water-stained leaves, hydrogen sulfide odor, geomorphic position and microtopographic relief.</u>			

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UI-NERC (Cat 968) City/County: Millford Sampling Date: 11/14/2013
 Applicant/Owner: UI State: CT Sampling Point: Upland 6
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): backslope Local relief (concave, convex, none): none Slope (%): 0-3
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks: (Explain alternative procedures here or in a separate report.)
 Upland 6 is located on the side slope of the Metro North railway and is fill material.

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required): <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No wetland hydrology indicators were met. Soil was well drained at sample point. This is a non-wetland sample point.		

VEGETATION – Use scientific names of plants.

Sampling Point: Upland 6

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus alba</u>	<u>30</u>	Y	FACU	
2. <u>Acer rubra</u>	<u>10</u>	Y	FAC	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	<u>40</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	<u>35</u>	= Total Cover		
Herb Stratum (Plot size: <u>5 feet</u>)				
1. <u>Fallopia japonica</u>	<u>40</u>	Y	UPL	
2. <u>Rosa multiflora</u>	<u>10</u>	Y	FACU	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>50</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1. <u>Celastrus orbiculatus</u>	<u>30</u>	Y	UPL	
2. _____				
3. _____				
4. _____				
	<u>30</u>	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (include photo numbers here or on a separate sheet.)

Hydrophytic vegetation is not present at the upland sample point and is considered non-wetland

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UH-NERC (Cat 986) City/County: West Haven Sampling Date: 11/15/2013
 Applicant/Owner: UI State: CT Sampling Point: Wetland 8
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: <u>Wetland 8</u>
Remarks: (Explain alternative procedures here or in a separate report.) Wetland 8 is located between the Metro North railway and berm leading to a commercial property	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Wetland 8 meets two primary and two secondary hydric soil indicators: water-stained leaves, presence of reduced iron, geomorphic position and microtopographic relief.	

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland 8

Tree Stratum (Plot size: <u>30 feet</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix nigra</u>	80	Y	OBL	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (AB)
4. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____				
6. _____				
7. _____				
	80	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
	130	= Total Cover		
Herb Stratum (Plot size: <u>5 feet</u>)				
1. <u>Rosa multiflora</u>	10	Y	FACU	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Phragmites australis</u>	30	Y	FACW	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	40	= Total Cover		
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1. _____				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
2. _____				
3. _____				
4. _____				
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: (include photo numbers here or on a separate sheet.) Wetland 8 meets the hydrophytic vegetation criteria and dominance test.				

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: UH-NERC (Cat 986) City/County: West Haven Sampling Date: 11/15/2013
 Applicant/Owner: UI State: CT Sampling Point: Upland 8
 Investigator(s): RKH Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): backslope Local relief (concave, convex, none): none Slope (%): 5
 Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland 8 is located between wetland 8 and commercial property.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: No wetland hydrology indicators were met. Soil was well drained at sample point. This is a non-wetland sample point.	

VEGETATION – Use scientific names of plants.

Sampling Point: Upland 8

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 feet</u>)				
1. None				
2.				
3.				
4.				
5.				
6.				
7.				
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: <u>15 feet</u>)				
1. <u>Elaeagnus angustifolia</u>	90	Y	FACU	
2.				
3.				
4.				
5.				
6.				
7.				
				90 = Total Cover
Herb Stratum (Plot size: <u>5 feet</u>)				
1. None				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
				_____ = Total Cover
Woody Vine Stratum (Plot size: <u>30 feet</u>)				
1. None				
2.				
3.				
4.				
				_____ = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (AB)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

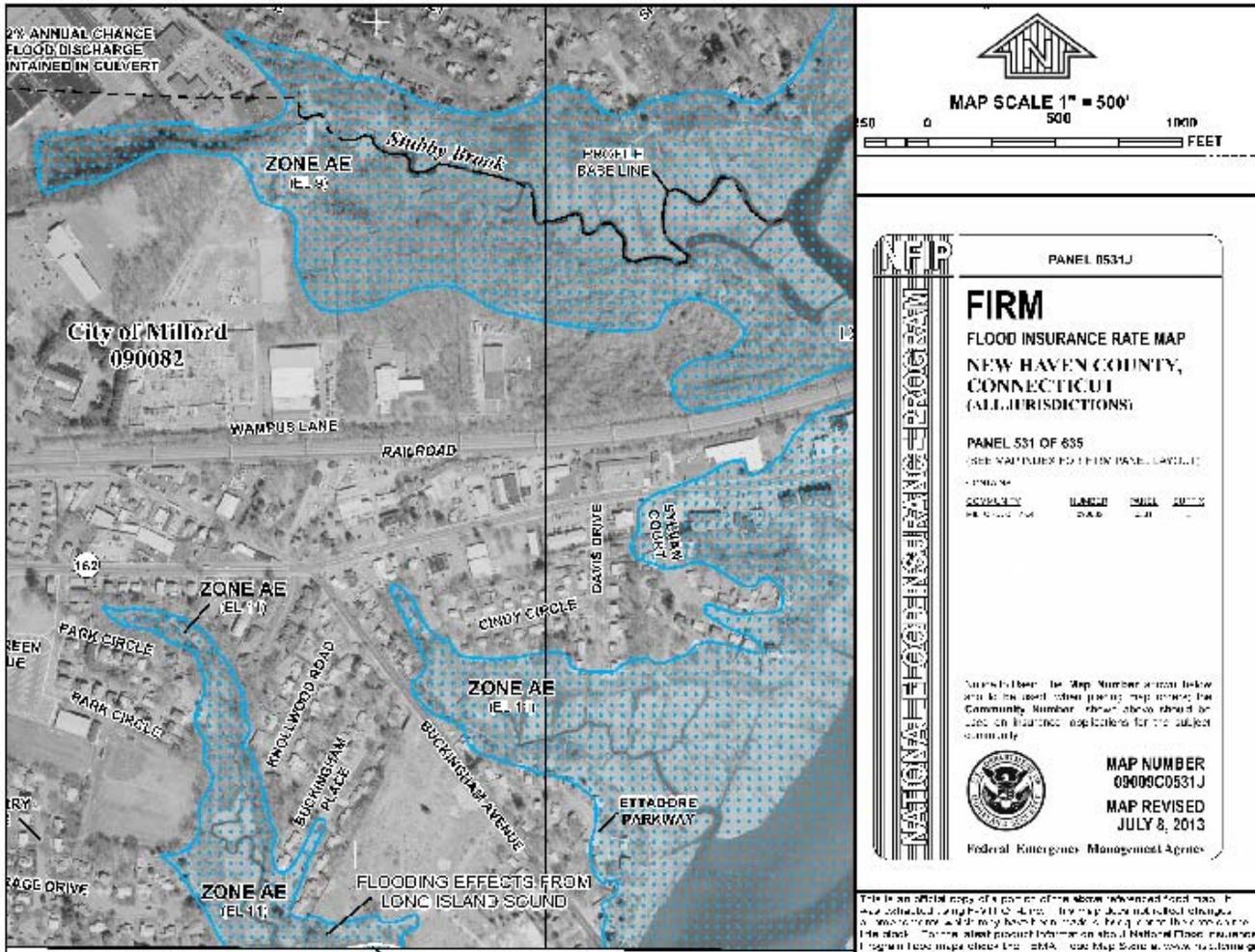
Remarks: (include photo numbers here or on a separate sheet.)

Hydrophytic vegetation is not present at the upland sample point and is considered non-wetland

APPENDIX D



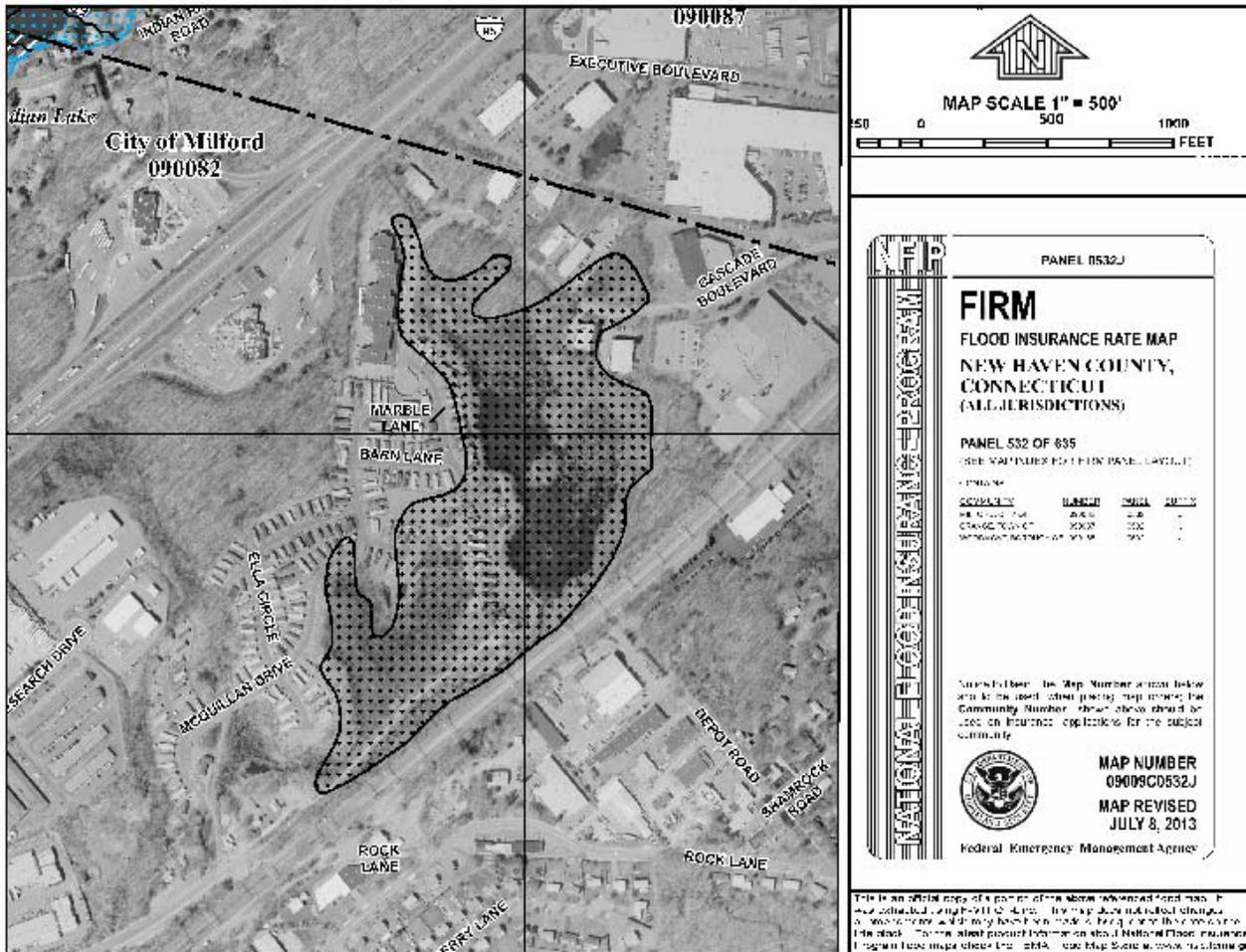
FEMA FIRM Map. Wetland 3 and Watercourse 7



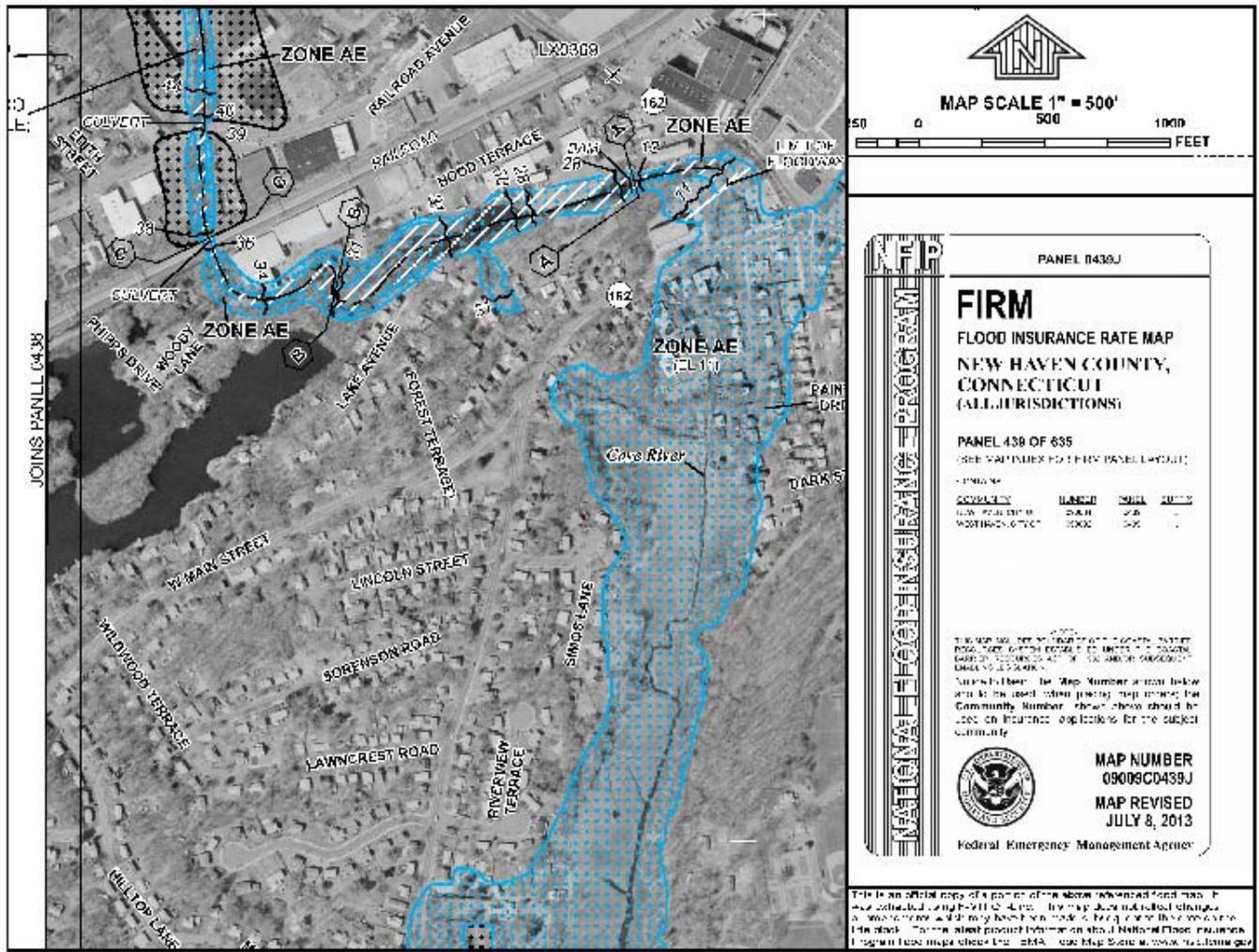
FEMA FIRM Map. Wetland 4



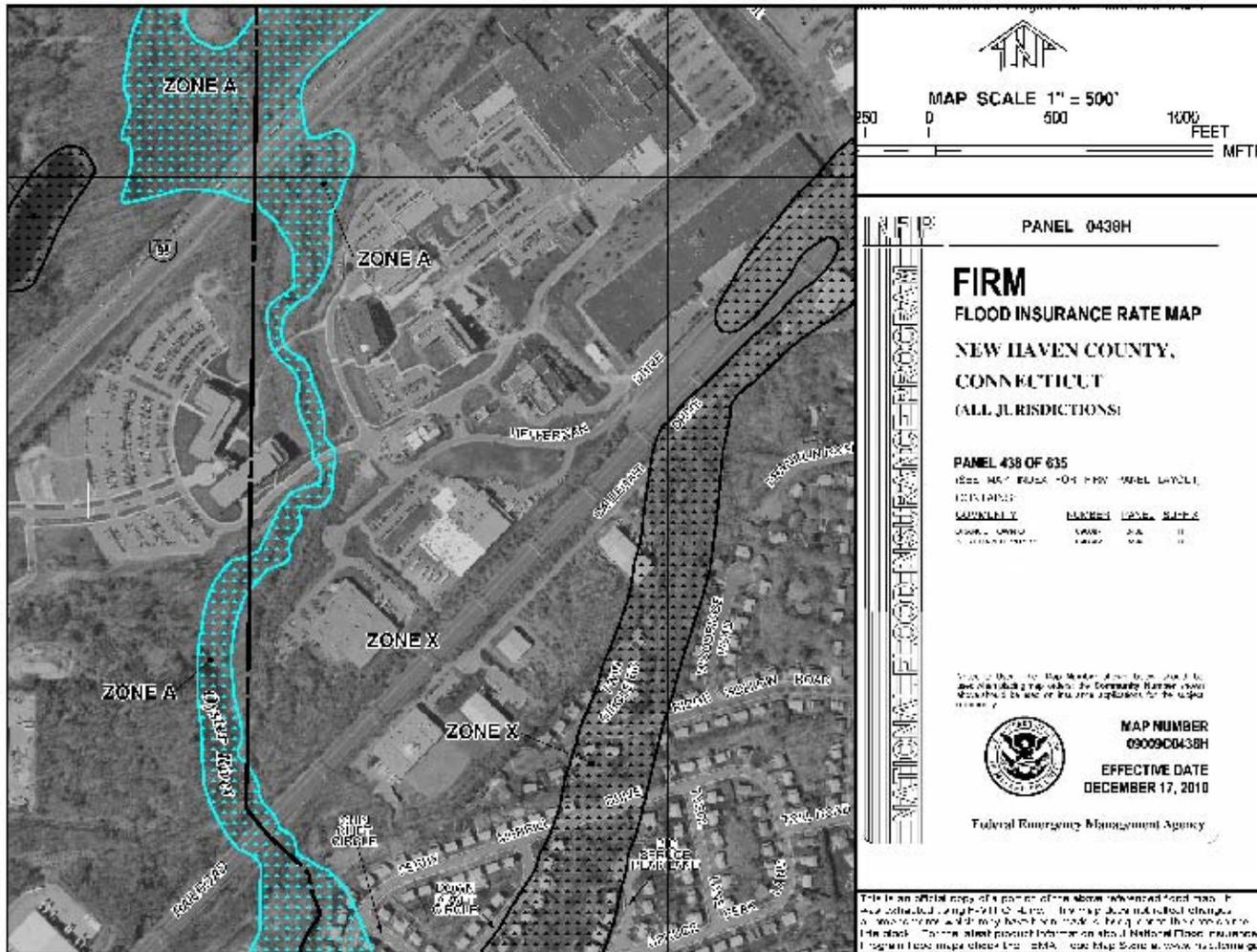
FEMA FIRM Map. Wetlands 5, 6, 9 and Watercourses 4 and 5



FEMA FIRM Map. Watercourse 6



FEMA FIRM Map. Wetland 7



FEMA FIRM Map. Wetland 8



U.S. Fish and Wildlife Service
National Wetlands Inventory

Feb 12, 2014



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deposition
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or correctness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

National Wetland Inventory. Wetlands 1 and 2 and Watercourse 1



U.S. Fish and Wildlife Service

National Wetlands Inventory

Feb 12, 2014



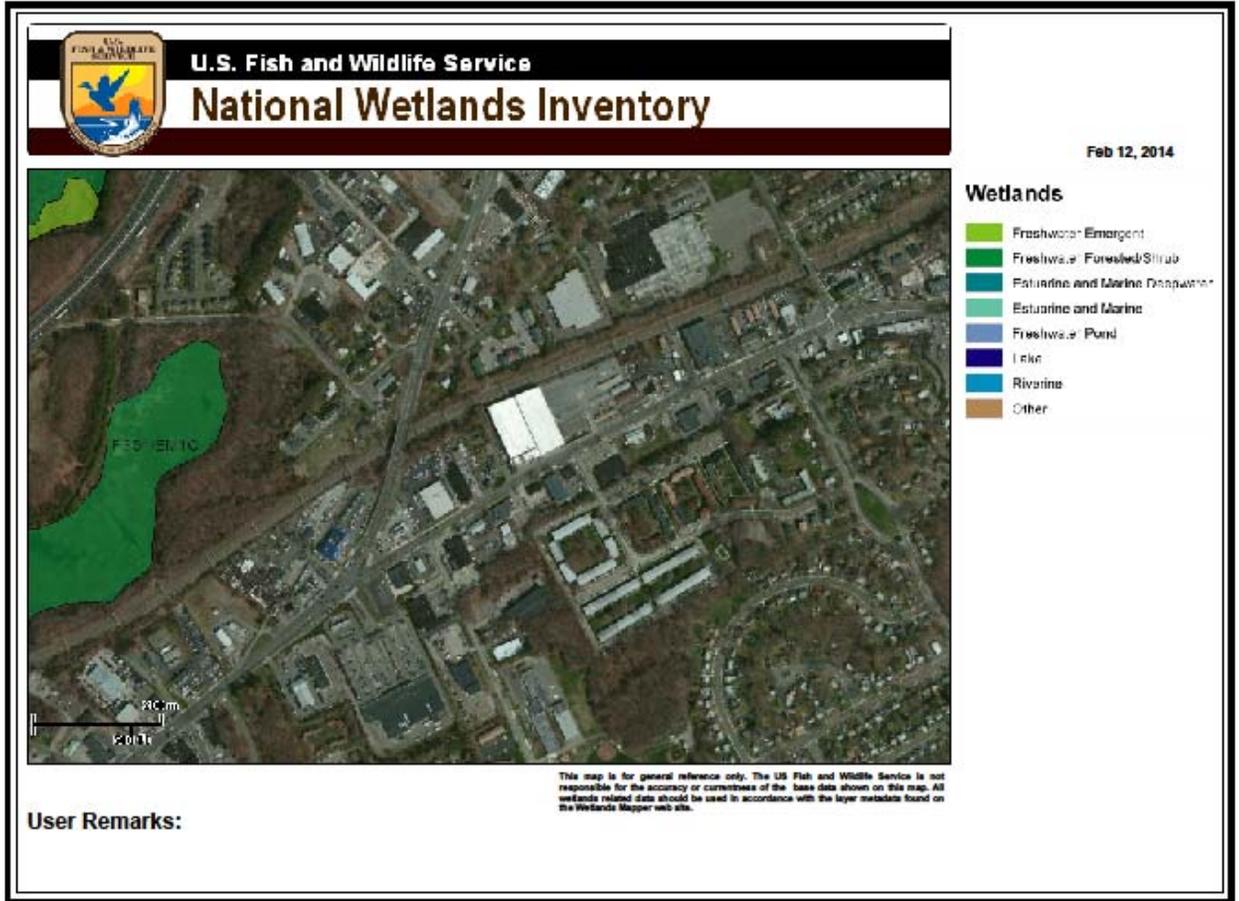
Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or completeness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

National Wetland Inventory. Watercourse 2



National Wetland Inventory. Wetlands 3 and Watercourse 7



U.S. Fish and Wildlife Service
National Wetlands Inventory

Feb 12, 2014



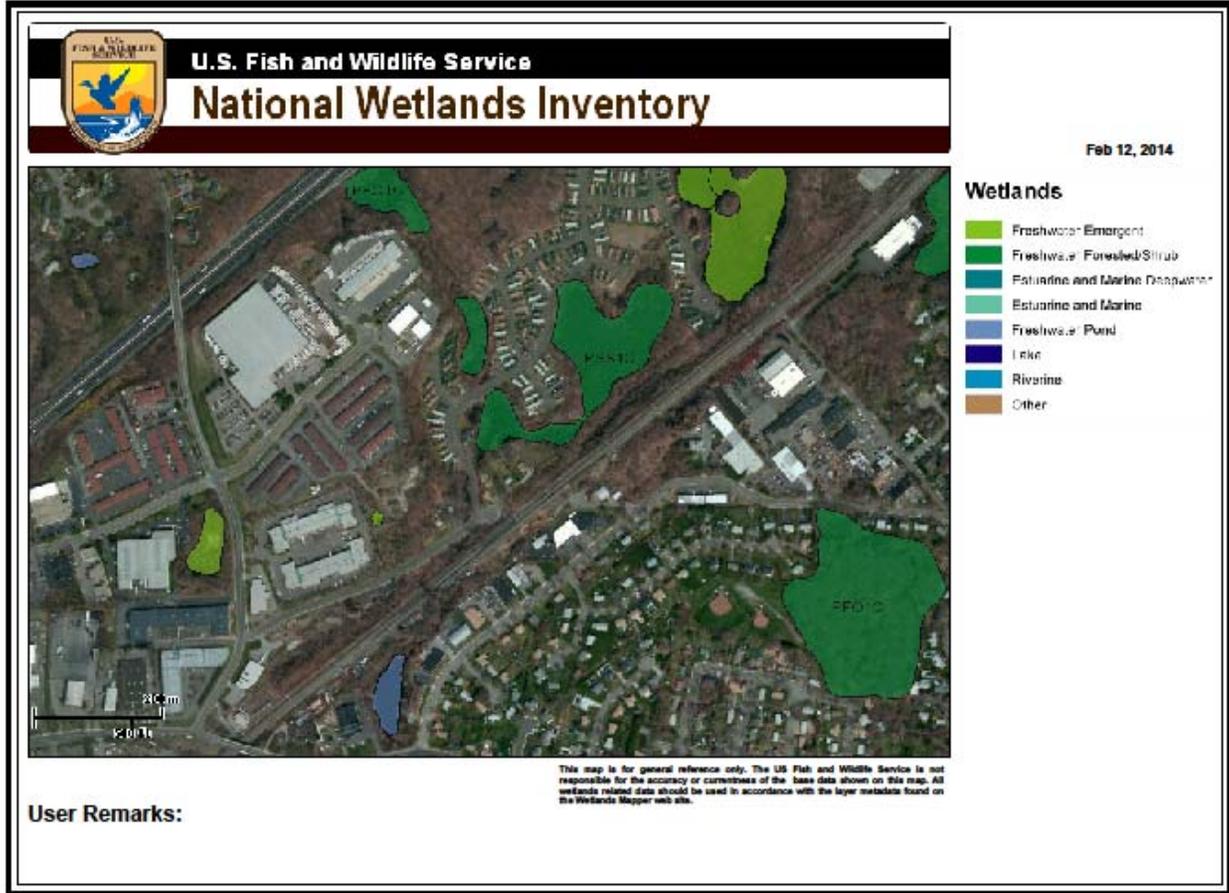
Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Disruptive
- Estuarine and Marine
- Freshwater Pond
- Lake
- Rivarine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

National Wetland Inventory. Wetlands 4 and Watercourse 3



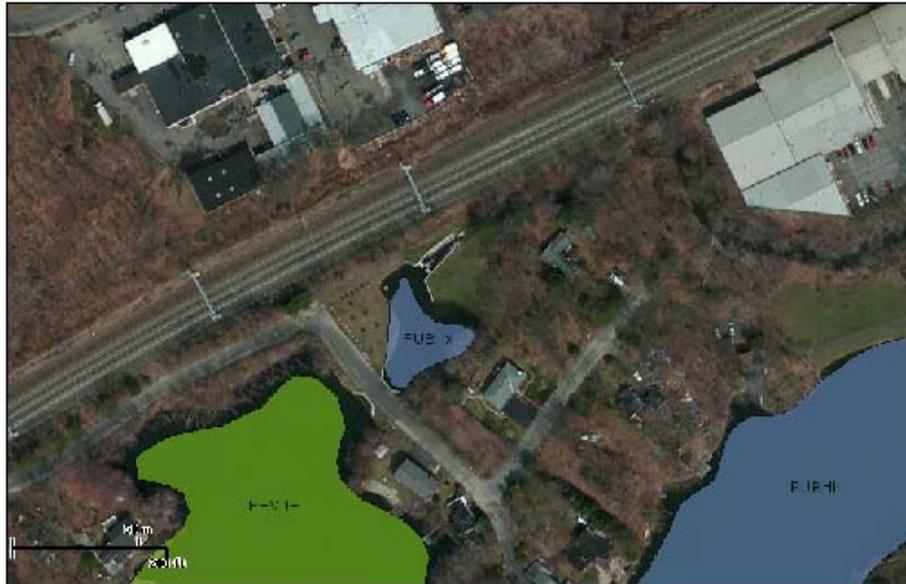
National Wetland Inventory. Wetlands 5 and 6 and Watercourses 4, 5, and 6



U.S. Fish and Wildlife Service

National Wetlands Inventory

Feb 12, 2014



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Uplake
- Riverine
- Other

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User Remarks:



U.S. Fish and Wildlife Service
National Wetlands Inventory

Feb 12, 2014

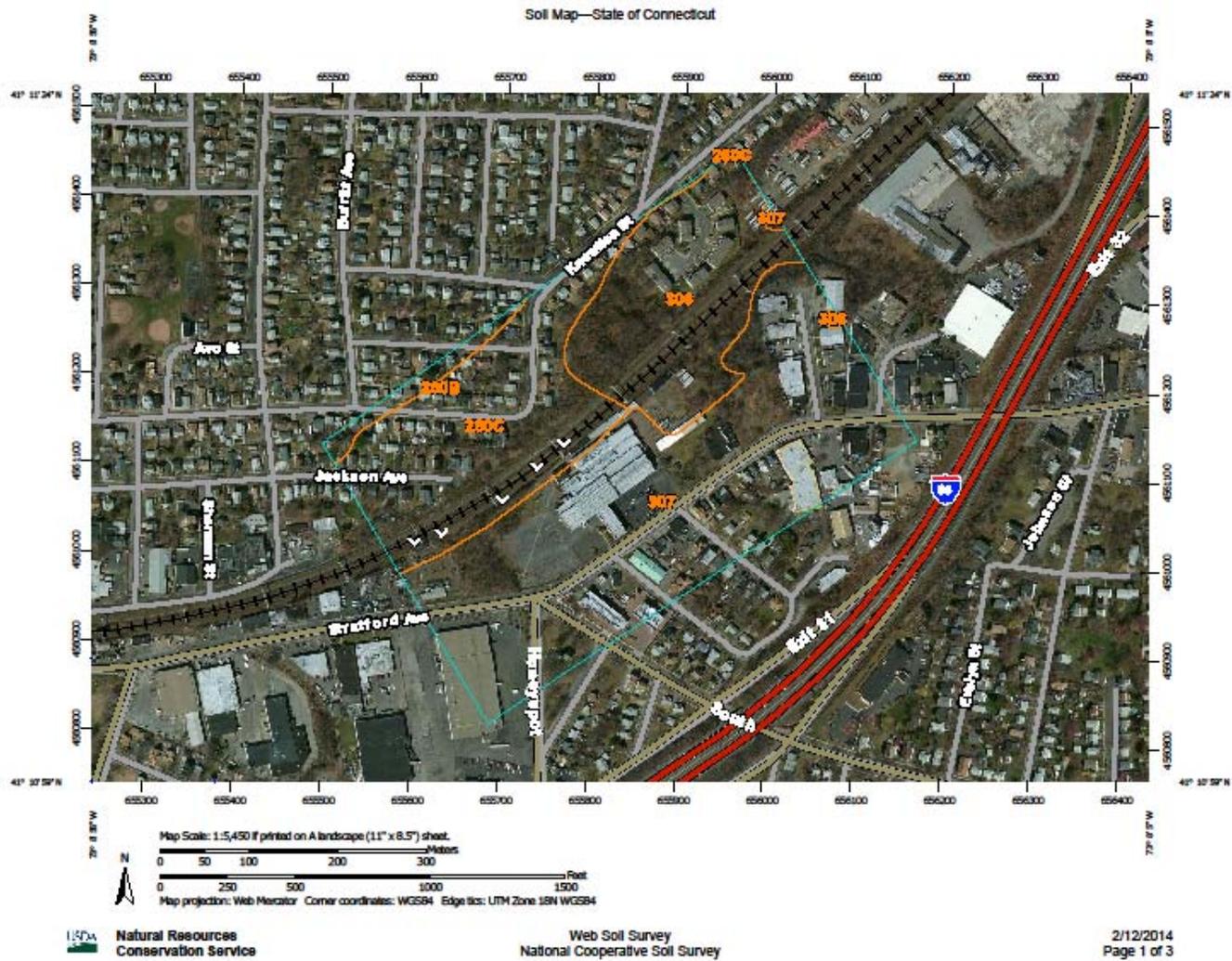


Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:



NRCS Soil Map. Wetlands 1 and 2 and Watercourse 1

Map Unit Legend

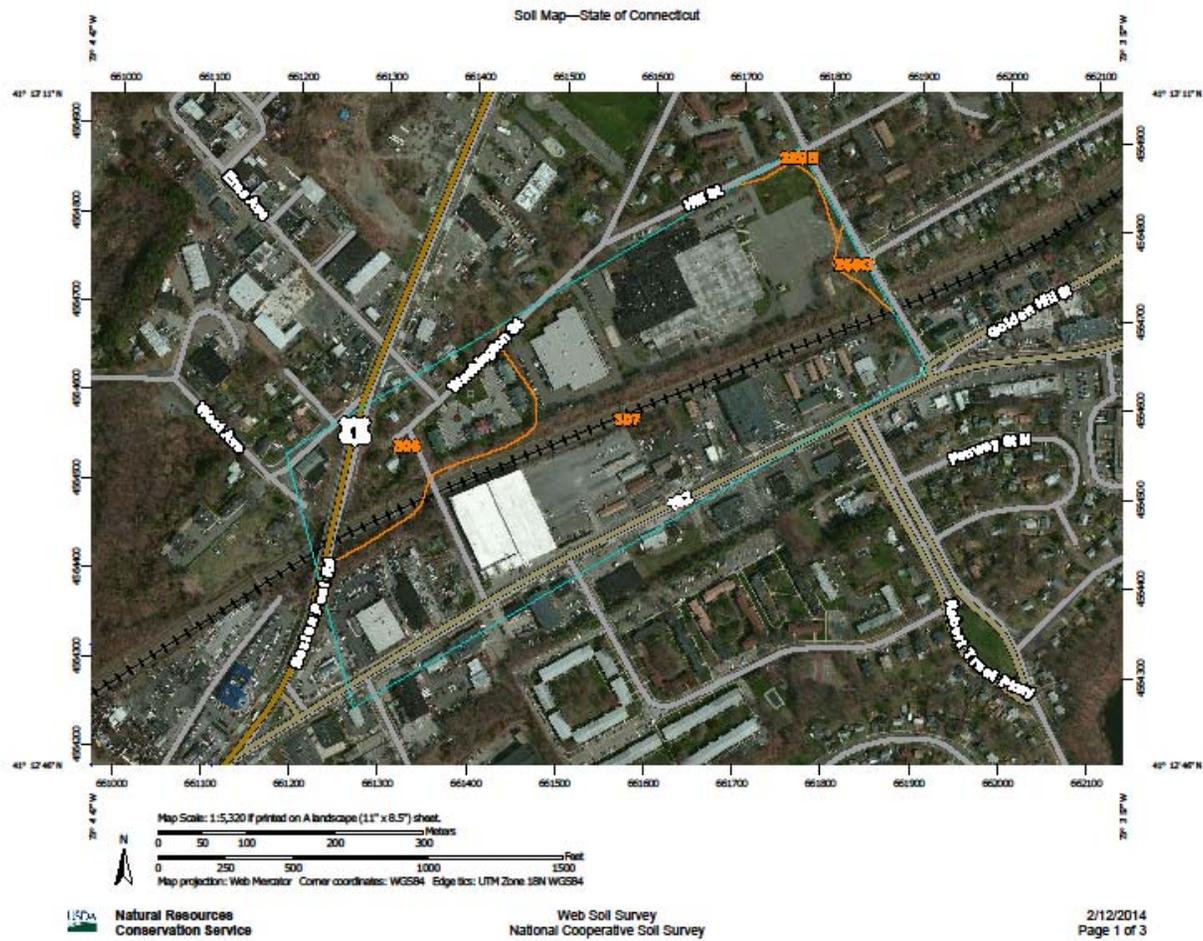
State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
260B	Charlton-Urban land complex, 3 to 8 percent slopes	1.1	2.0%
260C	Charlton-Urban land complex, 8 to 15 percent slopes	13.3	25.0%
306	Udorthents-Urban land complex	11.1	20.9%
307	Urban land	27.7	52.1%
Totals for Area of Interest		53.2	100.0%



NRCS Soil Map. Watercourse 2

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
229B	Agawam-Urban land complex, 0 to 8 percent slopes	0.0	0.2%
306	Udorthents-Urban land complex	12.7	91.4%
307	Urban land	1.2	8.4%
Totals for Area of Interest		13.9	100.0%



NRCS Soil Map. Wetlands 3 and Watercourse 7

Map Unit Legend

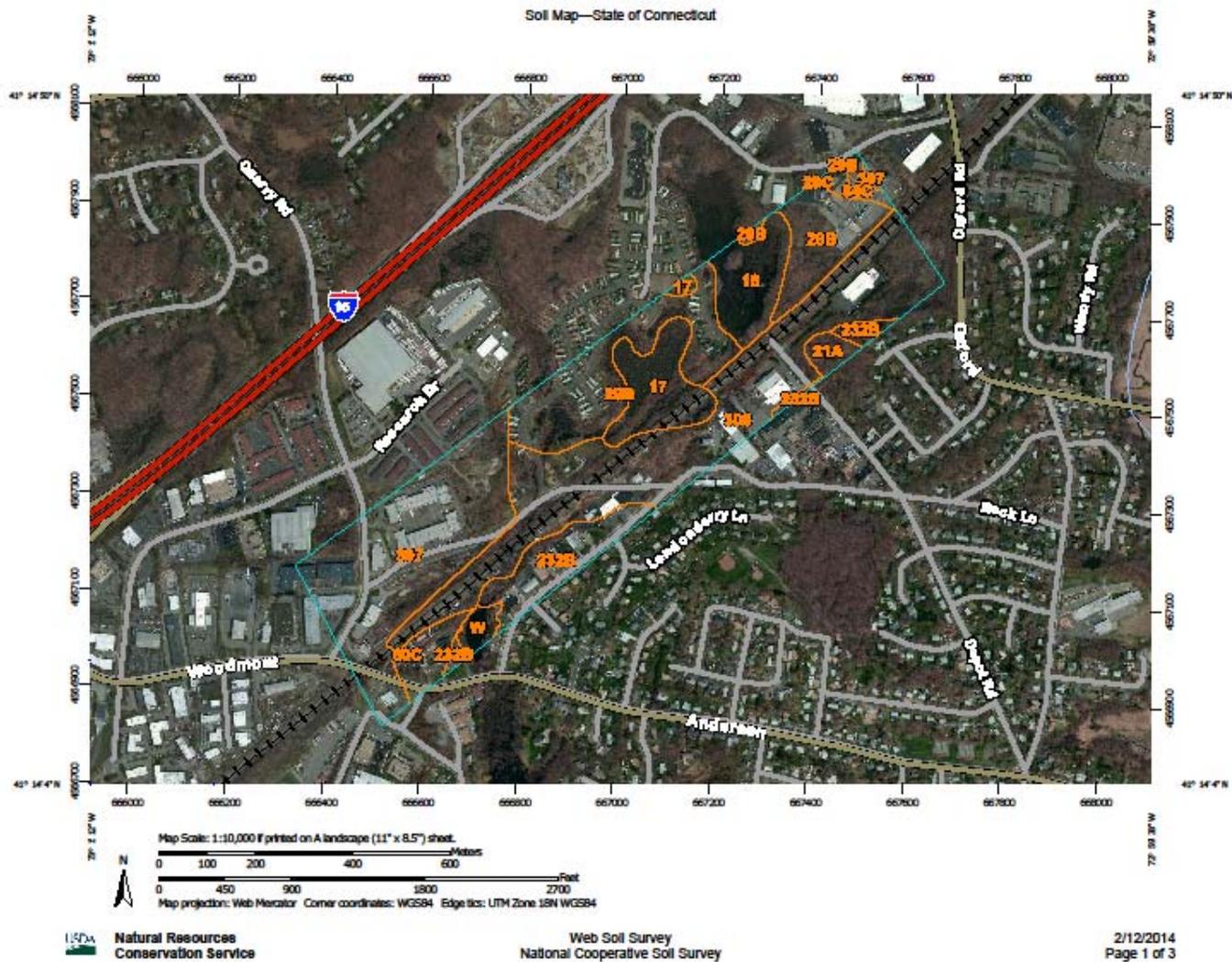
State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
229B	Agawam-Urban land complex, 0 to 8 percent slopes	0.3	0.6%
260C	Charlton-Urban land complex, 8 to 15 percent slopes	0.4	0.9%
306	Udorthents-Urban land complex	8.7	17.3%
307	Urban land	40.9	81.2%
Totals for Area of Interest		50.3	100.0%



NRCS Soil Map. Wetland 4 and Watercourse 3

Map Unit Legend

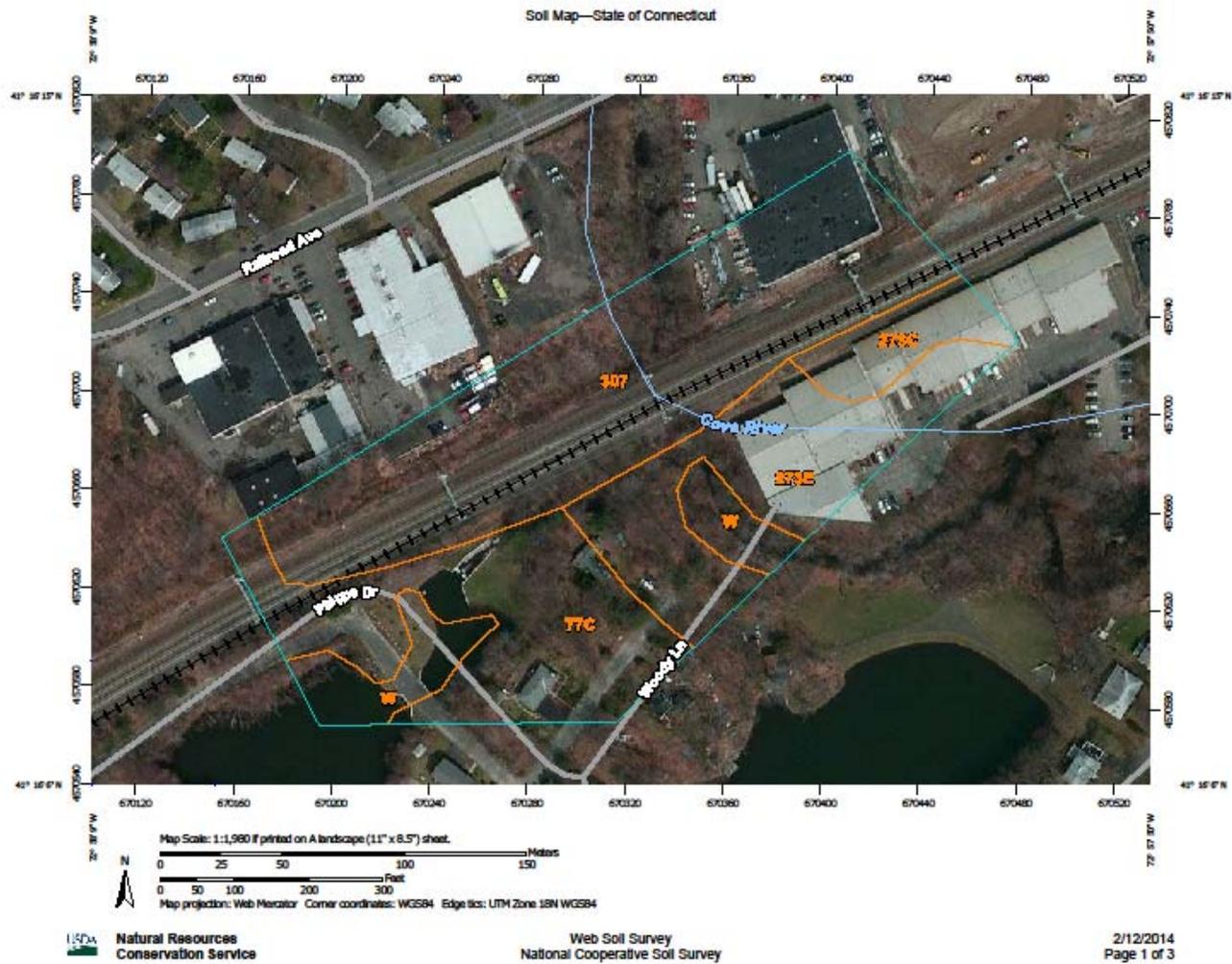
State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
229B	Agawam-Urban land complex, 0 to 8 percent slopes	5.7	29.1%
308	Udorthents, smoothed	13.8	70.9%
Totals for Area of Interest		19.5	100.0%



NRCS Soil Map. Wetlands 5, 6 and 8 and Watercourses 4, 5, and 6

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
17	Timakwa and Natchaug soils	8.4	6.7%
18	Calden and Freetown soils	7.2	5.7%
21A	Ninigret and Tisbury soils, 0 to 5 percent slopes	1.6	1.3%
29B	Agawam fine sandy loam, 3 to 8 percent slopes	23.7	18.9%
29C	Agawam fine sandy loam, 8 to 15 percent slopes	0.7	0.5%
60C	Canton and Charlton soils, 8 to 15 percent slopes	3.4	2.7%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	1.1	0.9%
232B	Haven-Urban land complex, 0 to 8 percent slopes	9.1	7.3%
306	Udorthents-Urban land complex	39.4	31.4%
307	Urban land	29.3	23.3%
W	Water	1.5	1.2%
Totals for Area of Interest		125.3	100.0%



NRCS Soil Map. Watercourse 7

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
77C	Cheshire-Holyoke complex, 3 to 15 percent slopes, very rocky	2.2	23.3%
273C	Urban land-Charlton-Chatfield complex, rocky, 3 to 15 percent slopes	0.5	5.2%
273E	Urban land-Charlton-Chatfield complex, rocky, 15 to 45 percent slopes	1.9	19.8%
307	Urban land	4.2	43.8%
W	Water	0.8	7.9%
Totals for Area of Interest		9.5	100.0%



NRCS Soil Map. Wetland 7

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
29B	Agawam fine sandyloam, 3 to 8 percent slopes	0.7	3.5%
306	Udorthents-Urban land complex	20.2	96.5%
Totals for Area of Interest		20.9	100.0%

Appendix E

Construction Sequencing



**Structure Locations 865 to 868
694 Naugatuck Avenue
Milford**

DRAWING #:14219-0801 / 0801

General Work Description:

New steel monopoles will be installed at 865N, 866N, 867N, and 868N. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 10 Days
- Installation of foundation – 12 Days
- Installation of steel pole – 16 Days
- Installation of wire – 12 Days

Construction Footprint

- Occupation Area = xx square feet (694 Naugatuck Ave.)

Structure 865N:

- Vegetation/Land clearing = 3,700 square feet (MNR ROW)
- Access road = 0 square feet (694 Naugatuck Ave.)
- Work pad = 7,500 square feet 75' X 100'(MNR ROW)

Structure 866N:

- Vegetation/Land clearing = 3,600 square feet (MNR ROW)
- Access road = 0 square feet (694 Naugatuck Ave.)
- Work pad = 2,500 square feet 50' X 50'(MNR ROW)

Structure 867N:

- Vegetation/Land clearing = 4,700 square feet (MNR ROW)
- Access road = 1,200 square feet (TBD)
- Work pad = 1,600 square feet 20' X 80'(MNR ROW)

Structure 868N:

- Vegetation/Land clearing = 8,700 square feet (MNR ROW)
- Access road = 3,000 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Road crossings

- Naugatuck Ave.

**Structure Locations 869 to 872
Rowe Avenue
Milford**

DRAWING #:14219-0802 / 0802

General Work Description:

New steel monopoles will be installed at 869N, 870N, 871N, and 872N. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 5 Days
- Installation of foundation – 12 Days
- Installation of steel pole – 16 Days
- Installation of wire – 12 Days

Construction Footprint

- Occupation Area = xx square feet (Rowe Ave.)

Structure 869N:

- Vegetation/Land clearing = 6,000 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 870N:

- Vegetation/Land clearing = 0 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 871N:

- Vegetation/Land clearing = 4,100 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 872N:

- Vegetation/Land clearing = 5,600 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Road crossings

- None

**Structure Locations 873 to 876
Rowe Avenue
Milford**

DRAWING #:14219-0803 / 0803

General Work Description:

New steel monopoles will be installed at 873N, 874N, 875N, and 876N. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Vegetation clearing – 10 Days
- Installation of foundation – 12 Days
- Installation of steel pole – 16 Days
- Installation of wire – 12 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure 873N:

- Vegetation/Land clearing = 0 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 874N:

- Vegetation/Land clearing = 7,400 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 875N:

- Vegetation/Land clearing = 10,800 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 876N:

- Vegetation/Land clearing = 11,000 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Road crossings

- None

**Structure Locations 877 to 880
Rowe Avenue & Schoolhouse Road
Milford**

DRAWING #:14219-0804 / 0804

General Work Description:

New steel monopoles will be installed at 877N, 878N, 879N, and 880N. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 15 Days
- Installation of foundation – 12 Days
- Installation of steel pole – 16 Days
- Installation of wire – 12 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure 877N:

- Vegetation/Land clearing = 12,000 square feet (MNR ROW)
- Access road = 4,400 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 878N:

- Vegetation/Land clearing = 11,700 square feet (MNR ROW)
- Access road = 3,900 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 879N:

- Vegetation/Land clearing = 8,800 square feet (MNR ROW)
- Access road = 950 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 880N:

- Vegetation/Land clearing = 1,600 square feet (Milford Reservoir)
= 22,200 square feet (MNR ROW)
- Access road = 750 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Road crossings

- Interstate 95

**Structure Locations 879 to 884
Schoolhouse Road
Milford**

DRAWING #:14219-0805 / 0805

General Work Description:

New steel monopoles will be installed at 882AN and 884N. New hardware and wire will be installed at TP883N and TP884N. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 20 Days
- Installation of foundation – 6 Days
- Installation of steel pole – 8 Days
- Installation of wire – 15 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure 882AN:

- Vegetation/Land clearing = 5,000 square feet (Milford Reservoir)
= 24,400 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50'(MNR ROW)

Structure TP883N:

- Access road = 1,800 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure TP884N:

- Access road = 950 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 884N:

- Vegetation/Land clearing = 18,600 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50'(MNR ROW)

Road crossings

- Schoolhouse Road

**Structure Locations 886 to Milvon
675 West Avenue
Milford**

DRAWING #:14219-0806 / 0806

General Work Description:

New steel monopoles will be installed at 886N, 887ANN, and 887ANS. STR "A" and STR "B" will be removed. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 25 Days
- Installation of foundation – 6 Days
- Installation of steel pole – 8 Days
- Installation of wire – 15 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure 886N:

- Vegetation/Land clearing = 23,700 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50' (MNR ROW)

Structure 887ANN:

- Vegetation/Land clearing = 20,600 square feet (MNR ROW)
- Access road = 600 square feet (MNR ROW)
- Work pad = 3,500 square feet 20' X 50' & 50' X 50' (MNR ROW)

Structure "A":

- Work pad = 1,000 square feet 20' X 50' (MNR ROW)

Structure 887ANS & Structure "B":

- Vegetation/Land clearing = 2,900 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50' (MNR ROW)
- Wetland Impact = 1,100 square feet (MNR ROW & UI Property)

Road crossings

- None

Stringing Site Location
675 West Avenue
Milford

DRAWING #:14219-0807 / 0807

General Work Description:

Existing access road use and maintenance for construction access to structures TP884N, 884N, 886N, 887ANN, and STR "A", and the stringing site. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 10 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Stringing Site:

- Vegetation/Land clearing = 5,300 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 25' X 100'(MNR ROW)

Road crossings

- None

**Structure Locations 865 to 867
694 Naugatuck Avenue
Milford**

DRAWING #:14220-0801 / 0808

General Work Description:

New steel monopoles will be installed at 864BSN, 864BSS, 865ES, 866S, and 867S. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 10 Days
- Installation of foundation – 15 Days
- Installation of steel pole – 20 Days
- Installation of wire – 15 Days

Construction Footprint

- Occupation Area = xx square feet (694 Naugatuck Ave.)
- Occupation Area = xx square feet (Naugatuck Ave.)

Structure 864BSN:

- Access road = 0 square feet (694 Naugatuck Ave.)
- Work pad = 7,500 square feet 75' X 100'(MNR ROW)

Structure 864BSS:

- Vegetation/Land clearing = 5,700 square feet (MNR ROW)
- Access road = 0 square feet (Naugatuck Ave.)
- Work pad = 4,375 square feet 35' X 125'(MNR ROW)

Structure 865ES:

- Vegetation/Land clearing = 4,000 square feet (MNR ROW)
- Access road = 0 square feet (Naugatuck Ave.)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 866S:

- Vegetation/Land clearing = 11,600 square feet (MNR ROW)
- Access road = 0 square feet (Naugatuck Ave.)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 867S:

- Vegetation/Land clearing = 3,100 square feet (MNR ROW)
- Access road = 0 square feet (Naugatuck Ave.)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Road crossings

- Naugatuck Ave.

**Structure Locations 868 to 871
Naugatuck Avenue
Milford**

DRAWING #:14220-0802 / 0809

General Work Description:

New steel monopoles will be installed at 868S, 869S, 870S, and 871S. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 10 Days
- Installation of foundation – 12 Days
- Installation of steel pole – 16 Days
- Installation of wire – 12 Days

Construction Footprint

- Occupation Area = xx square feet (Naugatuck Ave.)

Structure 868S:

- Vegetation/Land clearing = 5,600 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50'(MNR ROW & State ROW)

Structure 869S:

- Vegetation/Land clearing = 9,700 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50'(MNR ROW & State ROW)

Structure 870S:

- Vegetation/Land clearing = 10,500 square feet (MNR ROW)
- Access road = 950 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50'(MNR ROW & State ROW)

Structure 871S:

- Vegetation/Land clearing = 16,900 square feet (MNR ROW)
- Access road = 8,200 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Road crossings

- None

**Structure Locations 872 to 875
Rowe Avenue
Milford**

DRAWING #:14220-0803 / 0810

General Work Description:

New steel monopoles will be installed at 872S, 873S, 874S, and 875S. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Vegetation clearing – 15 Days
- Installation of foundation – 12 Days
- Installation of steel pole – 16 Days
- Installation of wire – 12 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure 872S:

- Vegetation/Land clearing = 13,000 square feet (MNR ROW)
- Access road = 4,300 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 873S:

- Vegetation/Land clearing = 11,300 square feet (MNR ROW)
- Access road = 4,350 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 874S:

- Vegetation/Land clearing = 11,300 square feet (MNR ROW)
- Access road = 4,300 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Structure 875S:

- Vegetation/Land clearing = 11,300 square feet (MNR ROW)
- Access road = 4,800 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Road crossings

- None

**Structure Locations 876 to 879
Naugatuck Avenue & I-95 Ramp 34 North Entrance
Milford**

DRAWING #:14220-0804 / 0811

General Work Description:

New steel monopoles will be installed at 876S, 877S, 878S, and 879S. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 25 Days
- Installation of foundation – 12 Days
- Installation of steel pole – 16 Days
- Installation of wire – 12 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure 876S:

- Vegetation/Land clearing = 11,300 square feet (MNR ROW)
- Access road = 3,500 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 877S:

- Vegetation/Land clearing = 10,300 square feet (MNR ROW)
- Access road = 4,200 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 878S:

- Vegetation/Land clearing = 8,300 square feet (MNR ROW)
- Access road = 3,100 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 879S:

- Vegetation/Land clearing = 8,700 square feet (Milford Reservoir)
= 9,700 square feet (MNR ROW)
- Access road = 5,500 square feet (Milford Reservoir)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Road crossings

- Interstate 95

**Structure Locations 880 to 883
Schoolhouse Road
Milford**

DRAWING #:14220-0805/ 0812

General Work Description:

New steel monopoles will be installed at 880S and 882AS. New hardware and wire will be installed at TP883N. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 25 Days
- Installation of foundation – 6 Days
- Installation of steel pole – 9 Days
- Installation of wire – 9 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure 880S:

- Vegetation/Land clearing = 1,700 square feet (Milford Reservoir)
= 19,100 square feet (MNR ROW)
- Access road = 3,000 square feet (MNR ROW)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure 882AS:

- Vegetation/Land clearing = 17,600 square feet (Milford Reservoir)
= 18,300 square feet (MNR ROW)
- Access road = 12,800 square feet (Milford Reservoir)
- Work pad = 1,750 square feet 35' X 50'(MNR ROW)

Structure TP883S:

- Vegetation/Land clearing = 1,400 square feet (Milford Reservoir)
= 3,400 square feet (MNR ROW)
- Access road = 600 square feet (Milford Reservoir)
- Work pad = 1,500 square feet 30' X 50'(MNR ROW)

Road crossings

- Schoolhouse Road

**Structure Locations 884 to Milvon
Schoolhouse Rd & 772 Bridgeport Ave
Milford**

DRAWING #:14220-0806/ 0813

General Work Description:

New steel monopoles will be installed at 885S, 886S, and 887AS. New hardware and wire will be installed at TP884S. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing – 25 Days
- Installation of foundation – 9 Days
- Installation of steel pole – 12 Days
- Installation of wire – 15 Days

Construction Footprint

- Occupation Area = xx square feet (MNR ROW)

Structure TP884S:

- Vegetation/Land clearing = 400 square feet (Schoolhouse Rd)
= 7,500 square feet (MNR ROW)
- Access road = 3,500 square feet (MNR ROW)
- Work pad = 1,500 square feet 30' X 50' (MNR ROW)

Structure 885S:

- Vegetation/Land clearing = 4,200 square feet (Schoolhouse Rd)
= 9,200 square feet (MNR ROW)
- Access road = 6,500 square feet (Schoolhouse Rd)
- Work pad = 1,500 square feet 30' X 50' (MNR ROW)

Structure 886S:

- Vegetation/Land clearing = 3,800 square feet (750 Bridgeport Ave)
= 7,800 square feet (MNR ROW)
- Access road = 3,100 square feet (MNR ROW)
- Work pad = 1,000 square feet 20' X 50' (MNR ROW)
- Wetland Impact = 400 square feet (750 Bridgeport Ave)

Structure 887AS:

- Vegetation/Land clearing = 6,400 square feet (MNR ROW)
- Access road = 0 square feet (MNR ROW)
- Work pad = 2,500 square feet 50' X 50' (MNR ROW)
- Wetland Impact = 1,100 square feet (MNR ROW)

Road crossings

- Schoolhouse Rd

**Access Road to 879 & 880
I-95 Ramp 34 North Entrance
Milford**

DRAWING #:14220-0807/ 0814

General Work Description:

New access road to be built for construction access to structures 879S and 880S. The following construction activities will occur with the stated durations, but may not occur on consecutive dates and may occur concurrently.

- Installation of access road/clearing –20 Days

Construction Footprint

- Occupation Area = xx square feet (Milford Reservoir)

Stringing Site:

- Vegetation/Land clearing = 20,100 square feet (Milford Reservoir)
- Access road = 13,500 square feet (Milford Reservoir)

Road crossings

- None

Appendix F

Notice of Termination Form





General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

Notice of Termination Form

Please complete and submit this form in accordance with the general permit (DEP-PED-GP-015) in order to ensure the proper handling of your termination. Print or type unless otherwise noted.

Note: Ensure that for commercial and industrial facilities, registrations under the *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (DEP-PED-GP-014) or the *General Permit for the Discharge of Stormwater from Commercial Activities* (DEP-PED-GP-004) have been filed where applicable. For questions about the applicability of these general permits, please call the Department at 860-424-3018.

Part I: Registrant Information

1. Permit number: GSN			
2. Fill in the name of the registrant(s) as indicated on the registration certificate: Registrant:			
3. Site Address: City/Town: _____ State: _____ Zip Code: _____			
4. Date all storm drainage structures were cleaned of construction sediment: Date of Completion of Construction: _____ Date of Last Inspection (must be at least three months after final stabilization pursuant to Section 6(b)(6)(D) of the general permit): _____			
5. Check the post-construction activities at the site (check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Residential	<input type="checkbox"/> Commercial	<input type="checkbox"/> Capped Landfill
<input type="checkbox"/> Other (describe): _____			

Part II: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."	
_____ Signature of Permittee	_____ Date
_____ Name of Permittee (print or type)	_____ Title (if applicable)

Note: Please submit this Notice of Termination Form to:
STORMWATER PERMIT COORDINATOR
BUREAU OF WATER MANAGEMENT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Appendix G

Sedimentation and Erosion Control Inspection Report Form



**SEDIMENTATION AND EROSION CONTROL INSPECTION REPORT
THE UNITED ILLUMINATING COMPANY
MILVON-DEVON**

SITE # _____

<p>INSPECTION INFORMATION</p> <p>DATE: _____</p> <p>QUALIFIED INSPECTOR: _____</p> <p>RAIN EVENT <input type="checkbox"/></p> <p>WEEKLY <input type="checkbox"/></p> <p>SPECIAL <input type="checkbox"/></p>	<p>WEATHER INFORMATION</p> <p>CURRENT FORECAST: _____</p> <p>DATE OF LAST RAIN EVENT: _____</p> <p>AMOUNT OF LAST RAIN EVENT: _____</p>
---	--

GENERAL PROJECT COMPLIANCE

APPROXIMATE CURRENT ACRES DISTURBED:		DUST CONTROL MEASURES ESTABLISHED:	Y / N
CONSTRUCTION ENTRANCE INSTALLED:	Y / N	SILT FENCE INSTALLED & FUNCTIONAL:	Y / N
WASHOUT AREA ESTABLISHED:	Y / N	INLET PROTECTION INSTALLED & FUNCTIONAL:	Y / N
WASTE DISPOSAL AREA ESTABLISHED:	Y / N	ALL OTHER E&S CONTROLS INSTALLED & FUNCTIONAL:	Y / N
IN-ACTIVE AREAS STABILIZED:	Y / N	STORMWATER DISCHARGE OBSERVED:	Y / N
DESCRIPTION OF STORMWATER DISCHARGE: _____			

DISTRIBUTION:

In my judgment the site is in / out of compliance with the terms and conditions of the Stormwater Pollution Control Plan and permit.

Signature of Qualified Inspector

Date

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with section 22a-6 of the Connecticut General Statutes, pursuant to section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.”

Signature of Permittee/Authorized Representative

Date

ITEMS NOTED IN THIS INSPECTION:

List specific items relating to erosion & sediment controls, implementation of the plan, description of stormwater discharges, and any water quality monitoring performed during the inspection.

ITEM #	ITEM NOTED	DESCRIPTION OF DEFICENCY	REMEDIAL ACTIONS REQUIRED	IN COMPLIANCE	DATE NOTED	CURRENT STATUS

ITEMS NOTED IN THIS INSPECTION:

**Note: The item numbers listed above correspond to the circled numbering on the attached reference map.

ADDITIONAL COMMENTS OR NOTES:

- Additional Comments

Appendix H

Stormwater Monitoring Report Form (Turbidity Sampling Data)





**Connecticut Department of
Energy & Environmental Protection**
Bureau of Materials Management & Compliance Assurance
Water Permitting & Enforcement Division

**General Permit for the Discharge of Stormwater and Dewatering Wastewaters from
Construction Activities, issued 8/21/13, effective 10/1/13
Stormwater Monitoring Report**

SITE INFORMATION

Permittee: _____
Mailing Address: _____
Business Phone: _____ ext.: _____ Fax: _____
Contact Person: _____ Title: _____
Site Name: _____
Site Address: _____
Receiving Water (name, basin): _____
Stormwater Permit No. <u>GSN</u> _____

SAMPLING INFORMATION (Submit a separate form for each outfall)

Outfall Designation: _____	Date/Time Collected: _____
Outfall Location(s) (lat/lon or map link): _____	
Person Collecting Sample: _____	
Storm Magnitude (inches): _____	Storm Duration (hours): _____
Size of Disturbed Area at any time: _____	

MONITORING RESULTS

Sample #	Parameter	Method	Results (units)	Laboratory (if applicable)
1	Turbidity			
2	Turbidity			
3	Turbidity			
4	Turbidity			

(provide an attachment if more than 4 samples were taken for this outfall)

Avg = _____

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official: _____
Signature: _____ Date: _____

Please send completed form to:

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE
79 ELM STREET
HARTFORD, CT 06106-5127
ATTN: NEAL WILLIAMS

APPENDIX G
SOIL MANAGEMENT PLAN

**SOIL MANAGEMENT PLAN
FOR
MILVON – DEVON PROJECT
MILFORD, CONNECTICUT**

Revision: 7/11/2014

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Attachment 1	Milvon - Devon: Site Plan Overview
Attachment 2	Milvon - Devon: Soil Table
Attachment 3	Milvon - Devon Groudwater Table

1.0 INTRODUCTION

1.1 Background

Prior to the commencement of the project, UIL Holding Corporation (UIL) requires that actions must be taken to assure the proper handling and evaluation of excavated soils prior to their re-use or disposal. As such, the Contractor is required to follow all items described in the below soil management plan (SMP).

The project consists of the installation of 43 new steel transmission monopoles in Milford CT. From October 2013 through January 2014 both soils and groundwater were tested to assess the management of this material during construction. At each location a composite soil sample was taken of the total depth of the boring/test pit. Groundwater samples were taken via low-flow sampling methodology. If a sample was unsuccessful through low-flow methods a grab sample was retrieved in order to properly assess groundwater conditions.

1.2 Purpose and Scope

The purpose of this Soil Management Plan (SMP) is to define a program for handling, segregating, testing, reusing, and disposing of excessive spoils and managing groundwater. Specifically, the SMP outlines the handling, transportation and disposal requirements for soils excavated during the performance of the work. The SMP will also help minimize impacts to the environment and minimize the potential for human exposure during construction activities.

The information presented in this SMP provides general guidelines for soil and dewatering management during the project. The specific details and logistics of implementing this SMP shall be developed by UIL in collaboration with the Contractor and those administering construction in accordance with the contract documents. This plan is not intended to provide detail with regard to site-specific health and safety procedures. For the purpose of this plan, at all times, work shall be conducted in a manner that safeguards the health, safety and welfare of site workers, the general public, and the environment. Specific information regarding health and safety procedures and protective measures will be described in Health and Safety Plans (HASPs) prepared by the Contractor.

1.3 Employee Training

Prior to the initiation of the project, employees and subcontractors for the Contractor should receive a briefing based upon the contents of this plan. This briefing will include at a minimum the following items:

- Verbal description of the project and potential hazards that might be present.

- A chemical hazard briefing.
- Contractor will provide the appropriate training and/or certifications.
- The location of the nearest emergency communications, emergency facilities and emergency telephone numbers.
- Emergency procedures.
- The inspection and use of personal safety equipment.
- A discussion of the location of safe areas if emergency evacuation is necessary.
- How to detect/eliminate/prevent hazards through the use of monitoring and control measures.
- Decontamination procedures for equipment used for excavation.

Prior to the beginning of daily work activities, the Contractor will instruct their workers of the following:

- Current conditions
- Hazards pertaining to hazardous soil conditions
- Visual and olfactory signs of contaminated soils
- Recognition of potentially hazardous conditions such as buried containers, drums, tanks and utilities
- When to suspend excavation
- Who to notify upon discovery of contaminated soils of hazardous conditions

1.4 Project Team

The purpose of this section is to identify certain key roles and responsibilities relating to the soils and materials management aspect of this project

<u>TEAM MEMBER</u>	<u>ROLE</u>	<u>CONTACT</u>
UI Project Management	Management	Chris Hughes
UIL Environmental	Environmental Support	Shawn Crosbie
Fuss & O'Neill	Environmental Consultant	Caleb Sheetz
TBD	Environmental Contractor	TBD
Black & Veatch Inc.	Contractor	John Rector

1.5 Roles and Responsibilities

Various members of the Project team will be required to conduct specific tasks during construction/excavation activities. The following is an outline of certain key tasks relating to the soils and groundwater management aspect of this project. The listing is not intended to be comprehensive, but rather includes those items that are critical to the safe and successful execution of this project.

- A. The Contractor shall be responsible for the following:
 - a. Work with UI to determine project schedule, construction sequencing, and other operational parameters of the project and communicating such information to the project team.
 - b. Overseeing all construction work for the project.
 - c. If necessary, remove material from excavation/foundation location, stockpile next to excavation and load trucks.
 - d. Remove groundwater from excavation/foundation location.
 - e. Complying with a work activity specific Job Hazard Analysis JHA (on file with UIL) and all other applicable local, state, and federal health and safety standards pertaining to work scope.
 - f. Protecting the health of workers, other on-site personnel, the general public, and minimizing impacts to the environment.
 - g. Ensuring that the streets surrounding the site are kept clean during construction.

- B. UI Project Management/Environmental Services shall be responsible for the following:
 - a. Reviewing and making recommendations regarding overall compliance with internal procedures and the SMP with the Contractor and soil management facility.
 - b. Assist in the development of waste characterization and profile development.
 - c. Identification and selection process for appropriate, licensed, and permitted transporters and disposal facilities for waste disposal.
 - d. Ensuring that the work is conducted in compliance with necessary UI internal procedures, state and federal environmental requirements, guidelines, permits, approvals, and authorizations.
 - e. Coordinating with the Contractor and/or soil management facility for the proper relocation or segregation of material based upon screening and/or sampling results.

- C. Environmental Consultant shall be responsible for the following:
 - a. Perform characterization of either/both of groundwater and/or soil.
 - b. Submit groundwater and/or soil samples to laboratory.
 - c. Work with Environmental Contractor for the submission of registration to CT DEEP for "Remediation Wastewaters" and any necessary municipal correspondence.
 - d. Update UI Environmental Group on all conditions

- D. The Environmental Contractor shall be responsible for the following:
- a. Develop soil profile with landfill, set up transportation and disposal of all soil developed during project.
 - b. Transport soil from excavation/foundation location(s) to approved disposal facility.
 - c. Work with Environmental Consultant for the submission of registration to CT DEEP for "Remediation Wastewaters" and any necessary municipal correspondence.
 - d. Operate and maintain groundwater treatment system.

1.6 Special Conditions and Notice

This SMP dictates that the handling, storage, testing, and disposal of soils shall be conducted in accordance with local, state, and federal safety and environmental regulations, requirements, and guidelines. Some of which include (but are not limited to) the Connecticut Department of Energy and Environmental Protection (CTDEEP) Remediation Standard Regulations (RSRs) and Guidance for Utility Company Excavation (<http://dep.state.ct.us/wtr/remediation/utilitycomp.htm>). In complying with this SMP, the Contractor shall use its best efforts to protect workers and the public and avoid schedule delays.

The Contractor shall immediately (within 24 hours of occurrence) notify the Owner of any discrepancy, inconsistency, conflict, or ambiguity with respect to all or any portion of this Plan. The Owner's interpretation shall prevail in the event of any such discrepancy, inconsistency, conflict, or ambiguity.

2.0 SUBSURFACE CHARACTERIZATION

2.1 Groundwater & Soil Pre-Characterization

From October 2013 through January 2014 Fuss & O'Neill of Trumbull, CT and UI personnel conducted a thorough soil and groundwater assessment for the project. A total of 35 soil and 9 groundwater samples were retrieved from the proposed project work area. All analytical data from the sampling event can be seen in Attachment 2.

3.0 MATERIALS HANDLING

3.1 Planned Excavation Activities

At a minimum, the soil management activities described in this SMP will be employed during the handling of impacted material.

During excavation of soil onsite, the Contractor and/or their Subcontractors shall:

- a) Observe excavation for visual or olfactory evidence of changes in excavated materials. If potential environmental impacts are discovered, suspend excavation in that area and contact the UI PM
- b) Employ engineering control measures to minimize airborne dust, odors, and volatile emissions and maintain levels below the action levels shown in either the JHA or Health and Safety Plan (HASP).
- c) Periodically inspect equipment for leakage of fluids to verify that work areas are not being contaminated by equipment and that off-site areas are not being contaminated during waste transport.
- d) Based on the analytical soil results the Contractor will be responsible for decontaminating their own equipment.
- e) Should non-uniform conditions based off of the original characterization event be identified, the Contractor shall suspend work in the area and notify UI PM of conditions. UI PM will engage UI Environmental Group and begin developing future course of actions. These conditions include, but are not limited to: buried containers, drums or tanks, or explosive conditions due to contaminated vapors, etc. The Contractor will secure the area to protect against health risk or release into the environment. The Contractor will also amend the existing JHA or HASP as necessary.

3.2 Soil Handling Classifications

3.2.1 Soil Classified as Natural

A classification of "natural" refers to soil for which the analytical data indicates that the concentrations are below applicable CT RSR guidelines and below laboratory detection limits (i.e. non-naturally occurring) The CTDEEP does not place special management or disposal requirements on soil classified as natural; however, the reuse of soil that has been classified as natural should be limited to such purposes as commercial fill or road base.

The soils characterized in MD01, MDP01, MDP03, MD08, MDP15, MD09, MDP04, MDP05, MDP06, MDP16, MDP19, MDP07, MDP12, and MDP13 are classified as natural based on the analytical data received from October 2013 through January 2014 sampling event. Should the material not be able to be re-used onsite the material will need to be transported to an approved aggregate facility.

3.2.2 Soil Classified as Polluted

A classification of "polluted" refers to one or more non-natural chemical compounds at a concentration above both a statistically derived background concentration and the lower of the regulatory concentrations listed in the RSRs for the following:

- Direct exposure criteria (I/C DEC) for industrial or commercial properties.
- Pollutant mobility criteria (GB PMC)
- Pollutant mobility criteria (GA/GAA PMC)

The soils characterized in MD03, MDP17, MD10, MDP08, MDP09, MDP21, MD11, MDP22, MDP23, MD06, MD07 and MD14 are all classified as polluted based on the analytical data received from the soil characterization event performed from October 2013 through January 2014. Due to the Milvon - Devon Project scope and location polluted soils will not be able to be reused onsite and will be managed offsite by an approved contractor. The data can be seen in Attachment 1

3.2.3 Soil Classified as Contaminated

A classification of "contaminated" refers to material which exhibits concentrations of certain constituents exceeding the regulatory criteria. The following are the regulatory groupings which the Elm West analytical data was compared to:

- Direct exposure criteria (I/C DEC) for industrial or commercial properties.
- Pollutant mobility criteria (both GA and GB PMC)

The soil characterized during the sampling event from October 2013 through January 2014 indicated that the soil in MDP02, MSP14, MDP18, MD04, MDP10, MDP20, MDP11 and MD05 are classified as contaminated. Therefore all soil generated during construction must be disposed of offsite at an approved landfill. The data can be seen in Attachment 1.

3.2.3 Soil Classified as Hazardous/PCB

A classification of "Hazardous" or "PCB" includes soil containing regulated levels of PCBs and/or soil that are classified as a hazardous waste. Hazardous waste refers to soil that is impacted with a federally listed hazardous waste (s) or is characteristically hazardous due to ignitability, corrosivity, reactivity, and/or toxicity or is listed as a hazardous waste, pursuant to RCRA Title 22a, Part 449 (c) or 40 CFR 260-299. Hazardous waste and soil containing PCB must be disposed of in accordance with State and Federal Regulations.

Based on the soil assessment event performed from October 2013 through January 2014 results indicated that there is not a presence of hazardous constituents or PCBs in the areas that were sampled.

3.3 Material Loading and Transportation

The Environmental Consultant or Environmental Contractor shall work with the Contractor and observe the following provisions when transporting excavated materials:

- a) Non-hazardous manifests and/or Material Shipping and Record Logs (MSRLs) must be documented with the site specific information and signed off by a UI representative
- b) Provisions must be made to prevent debris from spilling off of construction equipment when loading soil on to trucks for transport.
- c) All material loaded into trucks must be free of any free-draining liquids.*
- d) Trucks must travel with their loads covered.
- e) Any soil on roadways must be swept up or into trenches in a timely manner.
- f) An anti-tracking pad must be available at the Soil Management Facility in order to minimize off-site migration of environmentally impacted soil.

**due to the location of the project the groundwater table will range from 0.5 feet below grade to 21 feet below grade and the spoils may be saturate, therefore a Cusco will be used to extract the spoils.*

4.0 GROUND WATER

4.1 Ground Water Characterization for Dewatering

Due to the nature of the Milvon - Devon Project dewatering activities will be necessary. Therefore between October 2014 and January 2014 all 9 temporary groundwater well locations were characterized to fully understand if contamination is present. Based on the analytical data received from the sampling events 3 (MD09, MD03 and MD07) of the 9 locations indicated that contamination is present and groundwater must be treated. Based on the samples linear vicinity (within 600 feet east to west) to the 3 contaminated groundwater locations, additionally the remaining 32 locations will also be treated as either contaminated (i.e., treatment required). Due to these exceedences UI will develop a localized treatment system and obtain a General Permit: Groundwater Remediation to Sanitary Sewer (DEP-WD-GP-007). UI will also work with the local authorities to obtain the necessary permits/registrations.

The other 6 locations which groundwater indicated not to have any levels exceeding CT General Permit: Groundwater Remediation to Sanitary Sewer (DEP-WD-GP-007) or Groundwater Remediation Wastewater Directly to Surface Water (DEP-WD-GP-020) will be discharged to an upland area away from the construction zone.

5.0 ENVIRONMENTAL/ENGINEERING CONTROLS DURING EXCAVATION ACTIVITIES

5.1 Dust Control

Construction activities should be conducted so as to minimize the creation and dispersion of dust. The following are engineering controls and mitigation techniques which can be used to minimize dust migration:

- Apply water while excavating, loading, and backfilling as needed.
- Minimize drop heights while excavating or loading.
- Keeps work area free of nuisance/excessive soils, minimizing spreading.

5.2 Vapor and Odor Control

The work area shall be monitored in accordance with the requirements of the HASP. In the event that excavation or other site activities generate excessive contaminants, vapors, or odors, as determined by air monitoring and/or direct observations, the Contractor shall employ control measures necessary to minimize the generation of these contaminants, vapors and/or odors.

5.3 Stormwater Management and Sedimentation Control

All stormwater shall be discharged in accordance with the CT DEEP ""General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities" (DEP-PERD-GP-015). Based on the size of the Milvon - Devon Project (>1 acre) a Stormwater Pollution Control Plan will be submitted to CT DEEP. Prior to construction sediment and erosion controls will be identified for use by UI construction personnel and the Environmental Consultant to eliminate/reduce any unnecessary sediment from migrating offsite.

5.3.1 Stormwater Required Best Management Applications

All stormwater associated with minor excavation activities shall follow the conditions set forth in section 6 of the CT DEEP General Permit DEP-PERD-GP-015. The following is a high level list of conditions:

- Maintain clean and neat soil stockpile area.
- Apply erosion and sediment controls as necessary.
- If using silt sacks disposal will be within accordance with appropriate waste stream management.

6.0 DISPOSAL

6.1 Disposal Facilities

Based upon the analytical data, all the excess material generated during the Project will be classified and managed appropriately with respect to both internal procedures and local, state and federal regulations.

UI will work in coordination with the Environmental Consultant to develop the waste profile number, all appropriate paperwork, transportation and disposal of the excessive spoils. Should there be any questions please contact either the UI Project Manager or Environmental Department.

6.2 Transportation

All transportation of spoils will be coordinated with the onsite UI Construction Supervisor, Environmental Consultant and/or UI Environmental Group. Transportation of excess material must be conducted using properly licensed drivers and trucks. Trucks shall be well maintained, have proper placards, and meet all applicable state and federal Department of Transportation (DOT) requirements.

In the event of transporting hazardous waste, licensed hazardous waste transporters will be utilized to transport and dispose of the hazardous wastes generated from project activities. The necessary documents, including hazardous waste manifests, shall be completed and accompany each truck driver to the disposal facility. These documents must be immediately accessible in case of emergency. Trucks carrying non-hazardous material will also carry proper documentation, including material sheet record logs, bills of lading, or manifests.

6.3 Disposal Records and Documentation

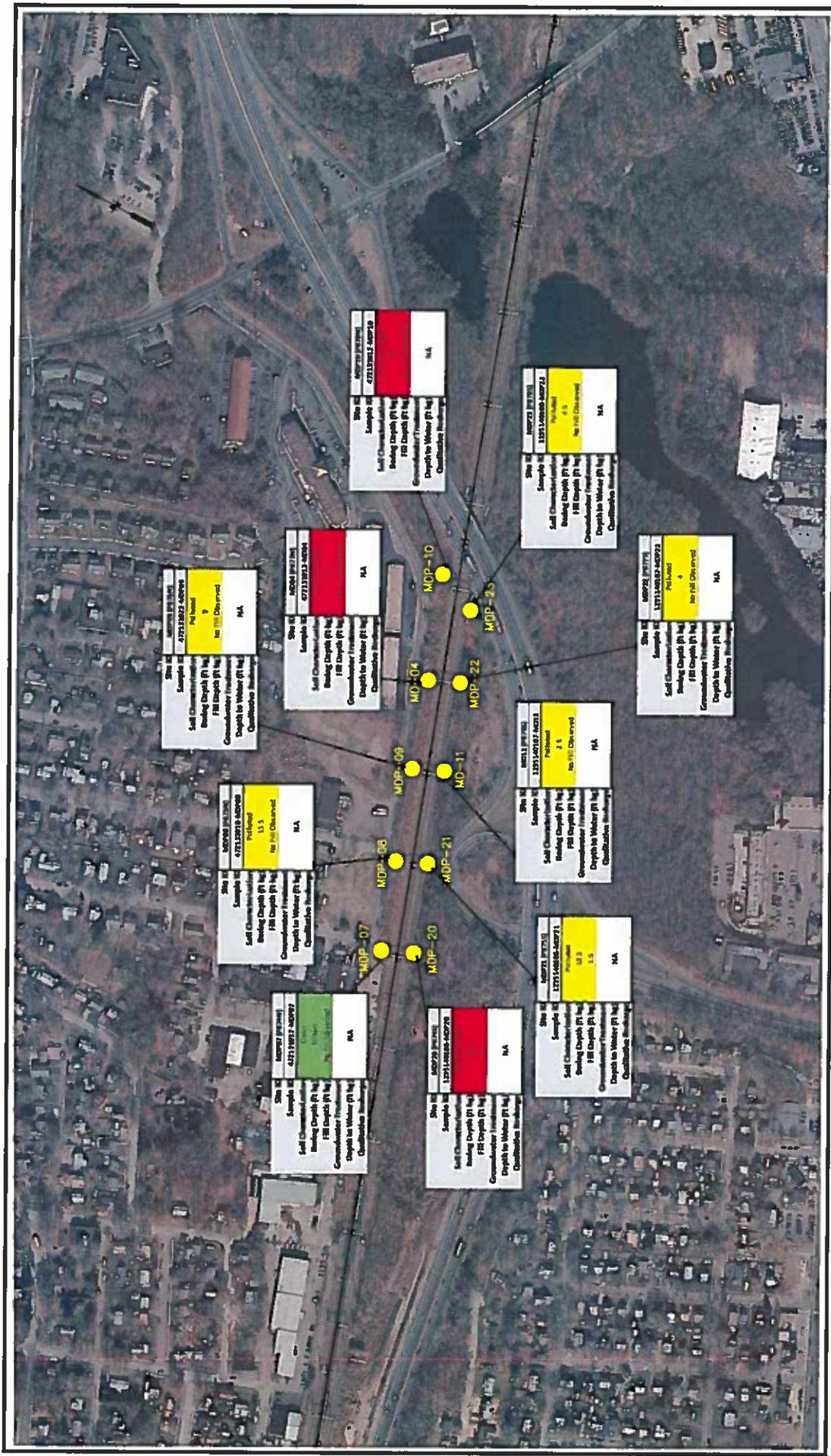
UI shall be designated as the "Generator" of any excess material transferred to a disposal facility. All paperwork, documentation and waste tracking records will be sent to UI Environmental Department to maintain accurate records.

11

12

Attachment 1

Site Plan



LEGEND

- SOIL BORING LOCATION

NOTES:
 GISEMAP - 2018 AERIAL PHOTOGRAPH FROM CREDO HERITAGE

SCALE: HORIZ. 1" = 200'

VERT. 1" = 10'

GRAPHIC SCALE

FUSS & O'NEILL
 14 SQUARE ROAD
 MILFORD, CONNECTICUT 06455
 860.371.7400
 www.fuss-on.com

UNITED ILLUMINATING COMPANY
 SECTION MDP07 - MDP23
 MILFORD, CONNECTICUT

FIGURE 1



Attachment 2
Soil Table (Table 1)

Table 1
 W/Metro North - Adiron-Dercon
 Summary of Soil Being Analytical Results
 June 2016

Location	Sample ID	Depth	Parameter	Unit	Result	Method	Reference	Notes
Adiron-Dercon	AD001	0-15"	Asbestos (Total)	ppb	ND	7000-91-1	100	
	AD001	0-15"	Asbestos (Amphibole)	ppb	ND	7000-91-1	100	
	AD001	0-15"	Asbestos (Serpentine)	ppb	ND	7000-91-1	100	
	AD001	0-15"	Lead	ppm	ND	3000-13-2	100	
	AD001	0-15"	Cadmium	ppm	ND	3000-13-2	100	
	AD001	0-15"	Copper	ppm	ND	3000-13-2	100	
	AD001	0-15"	Chromium (Total)	ppm	ND	3000-13-2	100	
	AD001	0-15"	Chromium (Hexavalent)	ppm	ND	3000-13-2	100	
	AD001	0-15"	Vanadium	ppm	ND	3000-13-2	100	
	AD001	0-15"	Barium	ppm	ND	3000-13-2	100	
Adiron-Dercon	AD002	0-15"	Asbestos (Total)	ppb	ND	7000-91-1	100	
	AD002	0-15"	Asbestos (Amphibole)	ppb	ND	7000-91-1	100	
	AD002	0-15"	Asbestos (Serpentine)	ppb	ND	7000-91-1	100	
	AD002	0-15"	Lead	ppm	ND	3000-13-2	100	
	AD002	0-15"	Cadmium	ppm	ND	3000-13-2	100	
	AD002	0-15"	Copper	ppm	ND	3000-13-2	100	
	AD002	0-15"	Chromium (Total)	ppm	ND	3000-13-2	100	
	AD002	0-15"	Chromium (Hexavalent)	ppm	ND	3000-13-2	100	
	AD002	0-15"	Vanadium	ppm	ND	3000-13-2	100	
	AD002	0-15"	Barium	ppm	ND	3000-13-2	100	
Adiron-Dercon	AD003	0-15"	Asbestos (Total)	ppb	ND	7000-91-1	100	
	AD003	0-15"	Asbestos (Amphibole)	ppb	ND	7000-91-1	100	
	AD003	0-15"	Asbestos (Serpentine)	ppb	ND	7000-91-1	100	
	AD003	0-15"	Lead	ppm	ND	3000-13-2	100	
	AD003	0-15"	Cadmium	ppm	ND	3000-13-2	100	
	AD003	0-15"	Copper	ppm	ND	3000-13-2	100	
	AD003	0-15"	Chromium (Total)	ppm	ND	3000-13-2	100	
	AD003	0-15"	Chromium (Hexavalent)	ppm	ND	3000-13-2	100	
	AD003	0-15"	Vanadium	ppm	ND	3000-13-2	100	
	AD003	0-15"	Barium	ppm	ND	3000-13-2	100	

1. An asterisk (*) following a detection limit indicates that the laboratory reporting limit exceeds one or more of the regulatory criteria, a re-sample might be required.
 2. ND = Not Detected.
 3. ND = Not Determined.
 4. Field values exceed the criteria.
 5. Criteria are in the same units as the analysis.
 7. 100 = Threshold & the detection limit.

Table 1
 187/18760-24-11-10/2016
 Summary of Soil Sampling Analytical Results
 June 2016

Parameter	187/18760-24-11-10/2016		187/18760-24-11-10/2016		187/18760-24-11-10/2016		187/18760-24-11-10/2016		187/18760-24-11-10/2016		187/18760-24-11-10/2016	
	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016	187/18760-24-11-10/2016
Sampling Date	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016	06/01/2016
Sample Depth	0-15 cm											
Sample ID	187/18760-24-11-10/2016-01	187/18760-24-11-10/2016-02	187/18760-24-11-10/2016-03	187/18760-24-11-10/2016-04	187/18760-24-11-10/2016-05	187/18760-24-11-10/2016-06	187/18760-24-11-10/2016-07	187/18760-24-11-10/2016-08	187/18760-24-11-10/2016-09	187/18760-24-11-10/2016-10	187/18760-24-11-10/2016-11	187/18760-24-11-10/2016-12
Location	187/18760-24-11-10/2016-01	187/18760-24-11-10/2016-02	187/18760-24-11-10/2016-03	187/18760-24-11-10/2016-04	187/18760-24-11-10/2016-05	187/18760-24-11-10/2016-06	187/18760-24-11-10/2016-07	187/18760-24-11-10/2016-08	187/18760-24-11-10/2016-09	187/18760-24-11-10/2016-10	187/18760-24-11-10/2016-11	187/18760-24-11-10/2016-12
Matrix	Soil											
Method	ICP-MS											
Units	mg/kg											
Result	0.15	0.12	0.18	0.14	0.16	0.13	0.17	0.15	0.14	0.16	0.13	0.15
Limit	0.15	0.12	0.18	0.14	0.16	0.13	0.17	0.15	0.14	0.16	0.13	0.15
Notes												
187/18760-24-11-10/2016-01	0.15	0.12	0.18	0.14	0.16	0.13	0.17	0.15	0.14	0.16	0.13	0.15
187/18760-24-11-10/2016-02	0.12	0.10	0.15	0.11	0.13	0.10	0.12	0.11	0.10	0.12	0.09	0.11
187/18760-24-11-10/2016-03	0.18	0.15	0.22	0.17	0.19	0.16	0.20	0.18	0.17	0.19	0.16	0.18
187/18760-24-11-10/2016-04	0.14	0.11	0.16	0.12	0.14	0.11	0.13	0.12	0.11	0.13	0.10	0.12
187/18760-24-11-10/2016-05	0.16	0.13	0.19	0.14	0.17	0.14	0.18	0.15	0.14	0.17	0.14	0.16
187/18760-24-11-10/2016-06	0.13	0.10	0.16	0.11	0.14	0.11	0.15	0.12	0.11	0.14	0.10	0.12
187/18760-24-11-10/2016-07	0.17	0.14	0.21	0.16	0.18	0.15	0.20	0.17	0.16	0.18	0.15	0.17
187/18760-24-11-10/2016-08	0.15	0.12	0.18	0.13	0.16	0.13	0.17	0.14	0.13	0.16	0.13	0.15
187/18760-24-11-10/2016-09	0.14	0.11	0.16	0.12	0.14	0.11	0.15	0.12	0.11	0.14	0.10	0.12
187/18760-24-11-10/2016-10	0.16	0.13	0.19	0.14	0.17	0.14	0.18	0.15	0.14	0.17	0.14	0.16
187/18760-24-11-10/2016-11	0.13	0.10	0.16	0.11	0.14	0.11	0.15	0.12	0.11	0.14	0.10	0.12
187/18760-24-11-10/2016-12	0.15	0.12	0.18	0.13	0.16	0.13	0.17	0.14	0.13	0.16	0.13	0.15

Attachment 3
Groundwater Table (Table 2)

APPENDIX H
CT DEEP CORRESPONDENCE



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

Bureau of Natural Resources
Wildlife Division
Natural History Survey – Natural Diversity Data Base

January 13, 2014

Mr. Shawn C. Crosbie
The United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477
Shawn.crosbe@uinet.com

Regarding: Milvon-Devon, Milford – installation of 115 kva transmission towers
Natural Diversity Data Base 201306481

Dear Mr. Crosbie:

In response to your request for a Natural Diversity Data Base (NDDB) Review of State Listed Species for Milvon-Devon in Milford, our records indicate the following extant populations of species on or within the vicinity of the site:

Peregrine Falcon (*Falco peregrinus*) Protection Status: Threatened Species

A pair of peregrine falcons is known to nest north of the Interstate 95 Bridge. Though somewhat tolerable of human disturbance, peregrine falcons will be negatively affected if work occurs during their nesting season and is too close to the nest.

Recommendation: Preferably work should be conducted work outside of the breeding season (July 31 – March 1) to protect nesting peregrine falcons. If work is conduct during the breeding season, activity should be a minimum of 600' from the nest.

The Natural Diversity Data Base includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. If the project is not implemented within 12 months, then another Natural Diversity Data Base review should be requested for up-to-date information.

Please be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site.

Thank you for consulting the Natural Diversity Data Base. If you have any additional questions, please feel free to contact me at Elaine.Hinsch@po.state.ct.us.

Sincerely,
/s/
Elaine Hinsch
Program Specialist II
Wildlife Division



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

April 2, 2014

Mr. Shawn Crosbie
The United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477
shawn.crosbe@uinet.com

Project: Splice of a 115 kva Transmission Conductor within an Existing Utility Right-of-Way at 772 Bridgeport Ave. in Milford, Connecticut
NDDB Determination No.: 201402926

Dear Shawn,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map provided for the proposed splice of a 115 kva transmission conductor within an existing utility right of way at 772 Bridgeport Ave. in Milford, Connecticut. According to our information there are extant populations of State Special Concern *Terrapene carolina carolina* (eastern box turtle) in the area where this work will occur. I would recommend the following protection strategies be implemented in order to protect these turtles:

- Silt fencing should be installed around the work area prior to construction;
- After silt fencing is installed and prior to construction, a sweep of the work area should be conducted to look for turtles;
- Workers should be apprised of the possible presence of turtles, and provided a description of the species (http://www.ct.gov/dep/cwp/view.asp?a=2723&q=473472&depNav_GID=1655);
- Any turtles that are discovered should be moved, unharmed, to an area immediately outside of the fenced area, and position in the same direction that it was walking;

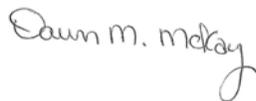
- No vehicles or heavy machinery should be parked in any turtle habitat;
- Work conducted during early morning and evening hours should occur with special care not to harm basking or foraging individuals; and
- All silt fencing should be removed after work is completed and soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

Thank you for implementing these protection measures for box turtle. I have attached a “Box Turtle” fact sheet for your files. This determination is good for one year. Please re-submit an NDDDB Request for Review if the scope of work changes or if work has not begun on this project by April 2, 2014.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection’s Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3592, or dawn.mckay@ct.gov . Thank you for consulting the Natural Diversity Data Base.

Sincerely,



Dawn M. McKay
Environmental Analyst 3

WILDLIFE IN CONNECTICUT

STATE SPECIES OF SPECIAL CONCERN

Eastern Box Turtle

Terrapene carolina carolina

Description

The eastern box turtle is probably the most familiar of the 8 species of turtles found in Connecticut's landscape. It is known for its high-domed carapace (top shell). The carapace has irregular yellow or orange blotches on a brown to black background that mimic sunlight dappling on the forest floor. The plastron (under shell) may be brown or black and may have an irregular pattern of cream or yellow. The length of the carapace usually ranges from 4.5 to 6.5 inches, but can measure up to 8 inches long. The shell is made up of a combination of scales and bones, and it includes the ribs and much of the backbone.

Each individual turtle has distinctive head markings. Males usually have red eyes and a concave plastron, while females have brown eyes and a flat plastron. Box turtles also have a horny beak, stout limbs, and feet that are webbed at the base. This turtle gets its name from its ability to completely withdraw into its shell, closing itself in with a hinged plastron. Box turtles are the only Connecticut turtle with this ability.

Range

Eastern box turtles are found throughout Connecticut, except at the highest elevations. They range from southeastern Maine to southeastern New York, west to central Illinois, and south to northern Florida.

Habitat and Diet

In Connecticut, this terrestrial turtle inhabits a variety of habitats, including woodlands, field edges, thickets, marshes, bogs, and stream banks. Typically, however, box turtles are found in well-drained forest bottomlands and open deciduous forests. They will use wetland areas at various times during the season. During the hottest part of a summer day, they will wander to find springs and seepages where they can burrow into the moist soil. Activity is restricted to mornings and evenings during summer, with little to no nighttime activity, except for egg-



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laying females. Box turtles have a limited home range where they spend their entire life, ranging from 0.5 to 10 acres (usually less than 2 acres).

Box turtles are omnivorous and will feed on a variety of food items, including earthworms, slugs, snails, insects, frogs, toads, small snakes, carrion, leaves, grass, berries, fruits, and fungi.

Life History

From October to April, box turtles hibernate by burrowing into loose soil, decaying vegetation, and mud. They tend to hibernate in woodlands, on the edge of woodlands, and sometimes near closed canopy wetlands in the forest. Box turtles may return to the same place to hibernate year after year. As soon as they come out of hibernation, box turtles begin feeding and searching for mates.

The breeding season begins in April and may continue through fall. Box turtles usually do not breed until they are about 10 years old. This late maturity is a result of their long lifespan, which can range up to 50 to even over 100 years of age. The females do not have to mate every year to lay eggs as they can store sperm for up

to 4 years. In mid-May to late June, the females will travel from a few feet to more than a mile within their home range to find a location to dig a nest and lay their eggs. The 3 to 8 eggs are covered with dirt and left to be warmed by the sun. During this vulnerable time, skunks, foxes, snakes, crows, and raccoons often raid nests. Sometimes, entire nests are destroyed. If the eggs survive, they will hatch in late summer to early fall (about 2 months after being laid). If they hatch in the fall, the young turtles may spend the winter in the nest and come out the following spring.

As soon as the young turtles hatch, they are on their own and receive no care from the adults. This is a dangerous time for young box turtles because they do not develop the hinge for closing into their shell until they are about 4 to 5 years old. Until then, they cannot entirely retreat into their shells. Raccoons, skunks, foxes, dogs, and some birds will prey on young turtles.

Conservation Concerns

The eastern box turtle was once common throughout the state, mostly in the central Connecticut lowlands. However, its distribution is now spotty, although where found, turtles may be locally abundant. Because of the population decline in Connecticut, the box turtle was added to the state's List of Endangered, Threatened, and Special Concern Species when it was revised in 1998. It is currently listed as a species of special concern. The box turtle also is protected from international trade by the 1994 CITES treaty. It is of conservation concern in all the states where it occurs at its northeastern range limit, which includes southern New England and southeastern New York.

Many states have laws that protect box turtles and prohibit their collection. In Connecticut, eastern box turtles **cannot** be collected from the wild (DEP regulations 26-66-14A). Another regulation (DEP regulations 26-55-3D) "grandfathers" those who have a **box turtle collected before 1998**. This regulation limits possession to a single turtle collected before 1998. These

regulations provide some protection for the turtles, but not enough to combat some of the even bigger threats these animals face. The main threats in Connecticut (and other states) are loss and fragmentation of habitat due to deforestation and spreading suburban development; vehicle strikes on the busy roads that bisect the landscape; and indiscriminate (and now illegal) collection of individuals for pets.

Loss of habitat is probably the greatest threat to turtles. Some turtles may be killed directly by construction activities, but many more are lost when important habitat areas for shelter, feeding, hibernation, or nesting are destroyed. As remaining habitat is fragmented into smaller pieces, turtle populations can become small and isolated.

Adult box turtles are relatively free from predators due to their unique shells. The shell of a box turtle is extremely hard. However, the shell is not hard enough to survive being run over by a vehicle. Roads bisecting turtle habitat can seriously deplete the local population. Most vehicle fatalities are pregnant females searching for a nest site.

How You Can Help

- *Leave turtles in the wild. They should never be kept as pets. Whether collected singly or for the pet trade, turtles that are removed from the wild are no longer able to be a reproducing member of a population. Every turtle removed reduces the ability of the population to maintain itself.*
- *Never release a captive turtle into the wild. It probably would not survive, may not be native to the area, and could introduce diseases to wild populations.*
- *Do not disturb turtles nesting in yards or gardens.*
- *As you drive, watch out for turtles crossing the road. Turtles found crossing roads in June and July are often pregnant females and they should be helped on their way and not collected. Without creating a traffic hazard or compromising safety, drivers are encouraged to avoid running over turtles that are crossing roads. Also, still keeping safety precautions in mind, you may elect to pick up turtles from the road and move them onto the side they are headed. Never relocate a turtle to another area that is far from where you found it.*
- *Learn more about turtles and their conservation concerns. Spread the word to others on how they can help Connecticut's box turtle population.*



State of Connecticut
Department of Environmental Protection
Bureau of Natural Resources
Wildlife Division
www.ct.gov/dep



The production of this Endangered and Threatened Species Fact Sheet is made possible by donations to the Connecticut Endangered Species/Wildlife Income Tax Checkoff Fund.

APPENDIX I
BEST MANAGEMENT PRACTICES FOR SNOW REMOVAL

Best Management Practices for Disposal of Snow Accumulations from Roadways and Parking Lots

Purpose: These guidelines have been developed to clarify DEEP recommendations to state and municipal officials, and others regarding the removal and disposal of snow accumulations from roadways and parking lots. For purposes of this guidance snow accumulations refers to snow banks and snowpiles that are removed by front-end loader or by loading on trucks for disposal. This guidance does not apply to normal snow plowing operations that must, inevitably, discharge some snow into wetlands and watercourses.

Implementation: While following these guidelines does not constitute a permit or authorization, the Department recognizes there is a considerable need for flexibility in implementation of this policy, particularly in emergency situations. There is no intent to interfere with snow plowing operations. Where trucking and snow dumping operations are undertaken the Department recommends these guidelines be followed.

Problem: Current road maintenance activities include removal of snow accumulations from bridges, roads and parking areas for the purpose of providing more space for subsequent snow storms and for ease of travel and parking. Sometimes this snow is moved by truck or with a front-end loader and deposited directly into surface waters of the state including streams, wetlands and Long Island Sound. This practice is not recommended due to the presence of dirt, salt, litter and other debris, which are routinely mixed in the accumulated snow.

Under normal conditions of snowmelt, the majority of these contaminants remains on or next to the paved surface or may be captured in stormwater catch basins. These contaminants can then be swept from streets and bridges or vacuumed from catch basin sumps. However, when accumulated snow is collected and dumped into surface waters, this mixture of snow, sand and debris may smother aquatic life in the bottom of streams and rivers and degrade the aesthetics of the surface water with silt plumes and litter. Large quantities of snow (and the sand and debris) may also cause blockage of storm drainage systems, resulting in increased chance for localized flooding.

Recommended Management Practice: Snow accumulations removed from roadways, bridges, and parking lots should be placed in upland areas only, where sand and other debris will remain after snowmelt for later removal. Care must be exercised not to deposit snow in the following areas:

- freshwater or tidal wetlands or in areas immediately adjacent to such areas where sand and debris may be flushed during rainstorms;
- on top of storm drain catch basins;
- in storm drainage swales;
- on stream or river banks which slope toward the water, where sand and debris can get into the watercourse; and
- in areas immediately adjacent (within at least 100 feet) of private or public drinking water well supplies (due to the possible presence of road salt).

For Governmental Entities: In normal winter conditions, governmental entities should follow the recommended management practices outlined above. In extraordinary winter conditions, the commissioner may, upon public notification, offer governmental entities the flexibility of limited in-water disposal. When such flexibility is offered, governmental entities who have determined that extraordinary circumstances exist where all upland, land-based disposal options have been fully exhausted (i.e., disposal capacity is not available) and snow needs to be removed to meet public safety demands (i.e., clear access ways for police, emergency medical and fire responders), may use certain waterways for snow disposal in accordance with the following conditions:

- Upland storage and disposal of snow (i.e., athletic fields, parks and other flat, open-field sites) and other snow management methods (i.e., snow melting equipment) must be the first alternatives explored and exhausted. Environmentally sensitive areas must be avoided;
- This guidance applies only to snow and ice which is not visibly contaminated with material other than salt and sand from road clearing activities;
- For coastal communities, preference should be given to snow disposal in salt water where available;
- Disposal in rivers or streams must be limited to those water bodies that have adequate flow and mixing and are not prone to ice jams;
- The disposal must occur only in open water in areas that will not interfere with navigation;
- Disposal must be conducted in a manner so as to prevent ice dam formation or damage to bridges, docks or other structures;
- Disposal in ponds and lakes is discouraged;
- There shall be no disposal in coastal or freshwater wetlands, eelgrass beds, vegetated shallows, vernal pools, shellfish beds mudflats, public water supply reservoirs and their tributaries, or others areas designated as being environmentally sensitive;
- The activity must comply with local laws and requirements;
- Precautions must be taken to avoid shoreline or stream bank damage or erosion from truck/equipment activity; and
- Governmental entities must notify the Department by email (address email to kevin.sowa@ct.gov) prior to disposing of snow and ice in waterways or, if advance notification is not possible, then the Department must be contacted as soon as possible after snow disposal has begun.

Notification: Notification can be made by addressing an email to Kevin Sowa at: kevin.sowa@ct.gov. The notification must include the following: (1) the name of the governmental entity making the notification; (2) contact information for the governmental entity including name, email address and phone number; (3) the street address where the snow disposal activity will occur; (4) the name of the waterbody where the snow will be disposed; (5) the estimated quantity of snow to be disposed; (6) the dates during which the disposal activity will occur; and (7) a statement that the governmental entity has exhausted all disposal alternatives and snow management methods and will make best efforts to adhere to these snow disposal guidelines.

Information: For further information please call the Water Permitting and Enforcement Division Engineer of the Day at 860-424-3025.

APPENDIX J
THE STATE OF HISTORIC PRESERVATION OFFICE
CORRESPONDENCE



Department of Economic and
Community Development

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May 27, 2014

Shawn C. Crosbie
Environmental Analyst
UIL Holdings Corporation
180 Marsh Hill Road
Orange, Connecticut 06477

Subject: Comments on the Preliminary Archeological Assessment of the Proposed United Illuminating Milvon-Devon Upgrade Project in Milford, Connecticut

Dear Mr. Crosbie,

The State Historic Preservation Office (SHPO) is responding to your request for our review of the above-referenced project and an archaeological assessment prepared by Heritage Consultants, LLC (Heritage). United Illuminating (UI) proposes the separation of utility lines from the existing overhead catenary system on Metro North's rail line system to free-standing monopoles constructed along the margins of the rail line. Heritage completed a review of SHPO historic resource inventories and background research to assess the potential for the project to affect known archaeological sites and/or areas where archaeological resources can be anticipated (i.e. "archaeologically sensitive areas"). Based on the materials submitted to our office, SHPO believes the Heritage investigations were conducted in accordance with our *Environmental Review Primer for Connecticut's Archaeological Resources* and provide a sound basis for evaluating the project's potential impacts to buried historic properties.

As noted by Heritage, the proposed installation of new poles will be largely confined to previously developed and now disturbed areas. Historic cartographic sources, soil mapping, existing underground utility installations, and pedestrian survey of the Areas of Potential Effects (APE) for this undertaking all support Heritage's opinion that intact and potentially significant archaeological resources are unlikely to be present within the areas of anticipated ground disturbance.

"[I]t is the professional opinion of Heritage Consultants, LLC that no further archeological investigations of the tower locations associated with the proposed United Illuminating Milvon-Devon Upgrade Project in Milford, Connecticut are warranted.." (Heritage Technical Memorandum dated 3/20/14).

Although several of the proposed tower (monopole) structures will be constructed near the mapped extent of intact natural soils bordering the railroad right-of-way, it appears the previous earth moving activities, including cutting of the original landforms to maintain the grade of the rail lines has likely destroyed any archaeological deposits, even in these locations. SHPO therefore concurs with Heritage's recommendation that further archaeological surveys or other investigations are not warranted with respect to this project. Prior ground disturbance appears to have affected the soils and sediments which may once have contained archaeological deposits. SHPO notes that the existing railroad right-of-way and corridor, in general, contains a high density of utility lines, including above ground electrical service. As such, the proposed addition of new poles and lines as part of this project appears to have a limited potential to diminish the integrity of the historic viewsheds and settings of adjacent historic buildings and districts. Based on the materials provided to our office, it is SHPO's opinion that this undertaking will have no adverse effects to historic properties.

The State Historic Preservation Office appreciates the opportunity to review and comment on this proposal and the CT Siting Council's consideration of historic resources in the exercise of its jurisdiction. We look forward to



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working with you and your clients on this important project. If you have any questions concerning our comments please contact me at (860) 256-2761 or Daniel.Forrest@CT.gov.

Sincerely,

A handwritten signature in blue ink that reads "Daniel T. Forrest".

Daniel T. Forrest
State Historic Preservation Officer

CC: Bellantoni/OSA

APPENDIX K
PROJECT TEAM CONTACT INFORMATION

<u>Name</u>	<u>Role</u>	<u>Organization</u>	<u>Office Phone</u>	<u>Cell Phone</u>	<u>Email</u>
Chris Hughes	Project Manager / Project Engineer	UI	203-926-4792	203-931-5132	Christopher.hughes@uinet.com
Jim Rasile	Construction Manager	UI	203-499-3895	203-627-5526	James.Rasile@uinet.com
Shawn Crosbie	Environmental Analyst	UI	203-926-4595	860-904-8551	Shawn.Crosbie@uinet.com
John Rector	Project Manager	B&V	913-458-7328	913-486-6950	RectorJS@bv.com
Ed Swenson	Construction Manager	B&V		925-548-9646	SwensonEG@bv.com